

**Child labour and school attendance:
Evidence from MICS and DHS surveys**

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Abstract

Child labour is one of the obstacles on the way to the Millennium Development Goal of universal primary education. This paper presents data on child labour and school attendance from 35 household surveys that cover one quarter of the world's population. The data were collected with Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS) between 1999 and 2005. Estimates for child labour and school attendance are described at the aggregate level for each country, as well as disaggregated by age, sex, place of residence, and household wealth. A series of bivariate probit regressions identifies the determinants of child labour and school attendance at the household level. Children from poor households and from households without a formally educated household head are more likely to be engaged in child labour and less likely to attend school than members of rich households and children living with an educated household head. This finding lends strong support to the hypothesis that poverty is the root cause of child labour. The paper concludes with recommendations for targeted cash transfers as a means to increase school attendance and reduce child labour.

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Keywords: child labour, education, household surveys, poverty, children, cash transfers

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The views expressed are those of the author and should not be attributed to UNICEF.

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1. Introduction

Universal primary education, the second Millennium Development Goal (MDG), is crucial to the achievement of an increase in living standards throughout the developing world. Today, at the midpoint between the adoption of the MDGs and the 2015 target date, many countries have already reached the goal of universal primary education but in many other countries, especially in Sub-Saharan Africa, primary and secondary school attendance rates continue to be low.

According to the latest enrolment statistics by UNESCO, 72 million children of primary school age were out of school in 2005 (United Nations 2007). A study by UNESCO and UNICEF shows that the number of children out of school is even higher once data on attendance is considered in addition to official enrolment statistics (UNESCO Institute for Statistics 2005). More than two thirds of all children out of school live in Sub-Saharan Africa and South Asia.

At the same time, millions of children work instead of attending school. The latest global report on child labour from the International Labour Organization (2006) states that 218 million children between 5 and 17 years – 14 percent of all children in that age group – were engaged in child labour in 2004. 126 million of these children were engaged in hazardous work that endangers the child's safety, health, and moral development.

The benefits of education have been established by numerous studies. A report by the U.S. Department of Labor (2000) summarizes more than 160 studies that show that children, in countries at all levels of development, benefit more over the course of their lifetime if they choose school over work. The benefits of increased education include higher wages as an adult, less dependence on social welfare, increased savings, a reduced crime rate, increased political participation, a lower fertility rate, better health, and a higher life expectancy. At the macroeconomic level, the increased productivity and higher income of educated workers are likely to promote economic growth, as the experience of countries with a well-educated work force has shown.

How children allocate their time to school, work, or leisure is influenced by many factors. This paper reviews evidence from national household surveys, with a particular emphasis on the poverty hypothesis. This common explanation of child labour argues that poverty is the underlying reason why children work. School attendance with its potential to increase future income may be the more rational choice for parents in the long term but short-term needs for subsistence of the household can compel parents to send their children to the labour market.

Following this introduction, Section 2 presents descriptive statistics on school attendance and child labour from 35 household surveys. In Section 3, the results of a regression analysis of the determinants of school attendance and child labour are discussed. Section 4 describes policy options targeted at an increase in schooling and a decrease in child labour. Section 5 concludes the paper with a summary of the main findings.

2. Household survey data on child labour and school attendance

The present study examines data from two types of household surveys, Demographic and Health Surveys (DHS) and Multiple Indicator Cluster Surveys (MICS). Both survey programmes are administered at the level of the household and they provide information on work and school attendance of children that is comparable across countries. The DHS and MICS surveys are closely coordinated to avoid overlapping data collection in one country.

The MICS programme was developed in the 1990s by the United Nations Children's Fund (UNICEF) in collaboration with the World Health Organization (WHO), UNESCO, the United Nations Statistics Division, the United States Agency for International Development (USAID), the London School of Hygiene and Tropical Medicine, and the United States Centers for Disease Control and Prevention (CDC). The original purpose of MICS was to collect data for the monitoring of progress toward the goals of the World Summit for Children that took place at the United Nations in New York in 1990. The survey programme was subsequently expanded to provide data for the tracking of the Millennium Development Goals that were adopted at the United Nations Millennium Summit in the year 2000.

A first round of MICS surveys was conducted around 1995, followed five years later by a second round in 65 developing countries, from which most of the data for the present study are drawn. In 2005 and 2006, a third round of MICS surveys was carried out in 56 developing countries. The first national datasets from these latest surveys became available in early 2008. The child labour module from the MICS questionnaire collects data on economic activity and household chores by children 5 to 14 years of age. Household chores are included in addition to economic activity on a farm or for a business to address the underreporting of domestic work, mainly by girls, in traditional labour force surveys (UNICEF 2000; 2006). MICS data can be obtained at the website childinfo.org.

The DHS project was initiated in the 1980s by the U.S. Agency for International Development to provide data on population and health trends. In contrast to the MICS, DHS is an ongoing programme with annual data collection. The list of countries that are surveyed varies from year to year so that every country is covered every three to five years. Since 1984, the DHS project has carried out over 200 surveys in more than 70 developing countries. Some recent surveys include the child labour module from the MICS. DHS data are available at the website measuredhs.com.

One disadvantage of the DHS and MICS surveys is that they only gather data at the household level. No data are collected on community characteristics like the education and health infrastructure. Work by Bhalotra and Heady (2003), Duryea and Morrison (2004), and other authors has shown that community characteristics like the availability of primary and secondary schools are important determinants of the work or school decision. Specialized DHS EdData surveys confirm that school attendance rates drop with increasing distance between the child's home and the nearest school, but the EdData surveys collect no data on child labour (Central Statistical Office [Zambia] and ORC Macro 2003; Uganda Bureau of Statistics and ORC Macro 2002). With the MICS and DHS data available for this study the analysis is limited to determinants at the level of the household.

In total, data from 35 household surveys – 26 MICS surveys and 9 DHS surveys – were analyzed. 34 of the surveys are nationally representative and one, Palestinians in Syria, is a subnational sample. The surveys are summarized in Table 1. The names of the listed regions are those used by UNICEF. Most surveys, 21 of 35, were conducted in 2000, three in 1999, and eleven after 2000. Combined, the surveys cover roughly one quarter of the world's population.

In household survey data, a child is usually considered to be in school if he or she is currently attending or attended at any time during the past year to correct for temporary absenteeism due to sickness or factors like the timing of the survey. This poses a challenge because it does not allow a precise evaluation of the trade-off between work and school for

Table 1: Survey data overview

Country	Region	Population in 2000 (thousands)		Survey	Year	Sample size		
		Total	7-14 years			Households	Household members	Children 7-14 years
Albania	Eastern Europe, CIS	3,062	515	MICS	2000	4,821	20,472	3,374
Angola	Eastern, Southern Africa	13,841	3,030	MICS	2001	6,251	29,817	6,749
Bahrain	Middle East, North Africa	672	96	MICS	2000	1,132	6,971	1,346
Bolivia	Latin America, Caribbean	8,317	1,639	MICS	2000	4,298	19,530	4,012
Burundi	Eastern, Southern Africa	6,486	1,542	MICS	2000	3,979	20,879	5,166
Central African Rep.	West, Central Africa	3,777	789	MICS	2000	13,865	92,466	24,795
Chad	West, Central Africa	8,216	1,759	DHS	2004	5,369	29,614	7,013
Colombia	Latin America, Caribbean	42,120	7,127	DHS	2004-05	37,211	157,840	27,892
Comoros	Eastern, Southern Africa	699	145	MICS	2000	3,678	27,060	5,858
Congo	West, Central Africa	3,438	740	DHS	2005	5,879	31,481	6,624
Congo, Dem. Rep.	West, Central Africa	50,052	6,431	MICS	2001	8,622	55,491	7,671
Côte d'Ivoire	West, Central Africa	16,735	3,610	MICS	2000	7,311	53,350	13,055
Dominican Republic	Latin America, Caribbean	8,265	1,535	MICS	2000	4,456	17,759	3,412
Gambia	West, Central Africa	1,316	258	MICS	2000	4,536	28,994	6,803
Guinea	West, Central Africa	8,434	1,733	MICS	2003	3,198	21,804	5,306
Guinea-Bissau	West, Central Africa	1,366	286	MICS	2000	4,370	35,069	7,448
India	South Asia	1,021,084	180,241	MICS	2000	118,318	619,046	109,623
Kenya	Eastern, Southern Africa	30,689	6,828	MICS	2000	8,936	45,501	11,206
Lao PDR	East Asia, Pacific	5,279	1,114	MICS	2000	6,446	38,511	8,953
Lebanon	Middle East, North Africa	3,398	545	MICS	2000	6,841	32,304	5,321
Lesotho	Eastern, Southern Africa	1,788	395	MICS	2000	7,401	32,744	6,827
Malawi	Eastern, Southern Africa	11,512	2,369	DHS	2004-05	13,664	60,747	14,563
Mali	West, Central Africa	11,647	2,562	DHS	2001	12,331	66,505	15,795
Mongolia	East Asia, Pacific	2,497	501	MICS	2000	6,000	29,948	5,327
Nicaragua	Latin America, Caribbean	4,959	1,068	DHS	2001	11,328	61,351	14,135
Niger	West, Central Africa	11,782	2,542	MICS	2000	4,321	26,256	5,787
Palestinians in Syria	Middle East, North Africa	383	73	MICS	2000	6,801	35,401	6,728
Philippines	East Asia, Pacific	75,766	14,686	MICS	1999	7,555	37,700	7,044
Senegal	West, Central Africa	10,343	2,282	DHS	2005	7,412	69,059	15,387
Sierra Leone	West, Central Africa	4,509	893	MICS	2000	3,907	24,347	5,124
Somalia	Eastern, Southern Africa	7,012	1,395	MICS	1999	4,371	22,234	4,840
Swaziland	Eastern, Southern Africa	1,023	241	MICS	2000	4,366	24,260	5,710
Tanzania	Eastern, Southern Africa	34,763	7,494	DHS	1999	3,615	19,255	4,342
Trinidad and Tobago	Latin America, Caribbean	1,285	196	MICS	2000	3,857	15,104	2,442
Uganda	Eastern, Southern Africa	24,309	5,560	DHS	2000-01	7,885	37,951	9,194
Total		1,440,822	262,222			364,331	1,946,821	394,872

Congo, Dem. Rep.: Population and sample size are for ages 10-14, not ages 7-14.

countries that have no data on current school attendance. In this paper, only countries with data on school attendance at the time of the survey are considered.¹

In addition, typical measures of school attendance like those published by the UNESCO Institute for Statistics (2007) only consider schools that are part of a formal system of education, partly due to a lack of data, partly due to adherence to the International Standard Classification of Education (ISCED) that does not cover alternative forms of education. In contrast, this study counts attendance of any type of school since the main concern is the trade-off between work and education, whether formal or informal.

Table 2 presents statistics on current school attendance among children 7 to 14 years of age. This age group was selected because in all 35 countries children are expected to enter primary school by age 7. In all surveys combined, 77 percent of 7- to 14-year-olds attended school at the time of their survey. In ten countries, at least 90 percent of children were in school. In seven countries – Central African Republic, Chad, Guinea-Bissau, Mali, Niger, Sierra Leone,

¹ In addition to the 35 countries listed in Table 1, child labour data were available for 19 more countries, from 17 MICS and 2 DHS surveys, but the surveys were conducted during school vacation.

Table 2: School attendance, 7-14 years (percent)

Country	7-10 years	11-14 years	Male	Female	Urban	Rural	Poorest	Second	Middle	Fourth	Richest	Total
Albania	48.0	53.6	52.6	49.1	46.9	53.0	46.5	57.6	56.7	46.3	47.6	50.9
Angola	71.9	78.0	77.0	72.7	78.2	66.4	56.1	66.4	73.4	79.1	88.5	74.8
Bahrain	98.0	99.2	98.5	98.7								98.6
Bolivia	98.0	91.9	95.8	94.5	98.2	90.8	89.5	94.3	96.4	98.4	99.7	95.1
Burundi	43.3	62.6	54.7	50.6	69.8	51.3	42.5	42.7	48.5	57.6	66.1	52.6
Central African Rep.	45.3	50.3	52.9	42.2	65.1	36.1	24.6	39.1	42.2	62.1	68.9	47.5
Chad	38.9	49.2	49.9	36.1	65.8	37.6	9.9	43.8	39.3	54.0	70.7	43.1
Colombia	94.9	90.5	91.5	93.9	94.6	88.5	86.8	91.6	94.1	95.9	97.1	92.7
Comoros	51.5	60.7	56.3	54.7	59.9	54.4	42.2	47.6	58.9	61.9	70.1	55.5
Congo	92.1	90.7	91.5	91.3	94.2	88.7	85.0	88.8	92.0	95.1	97.2	91.4
Congo, Dem. Rep.	62.5	65.7	70.2	60.0	79.0	58.9	56.8	51.8	60.8	70.8	84.4	65.0
Côte d'Ivoire	61.7	60.7	67.6	54.4	67.8	54.7	45.6	56.1	59.5	67.3	78.4	61.2
Dominican Republic	95.5	95.3	94.9	95.9	94.9	96.0	92.6	89.9	99.1	97.1	98.8	95.4
Gambia	63.4	68.4	70.8	60.5	75.9	60.1	49.4	60.8	70.4	74.0	86.2	65.5
Guinea	57.8	65.1	65.5	56.4	80.7	47.9	45.9	43.6	54.8	74.0	85.0	61.0
Guinea-Bissau	38.1	53.4	48.4	41.0	74.4	26.2	23.0	26.1	33.3	56.3	81.0	44.7
India	83.6	73.6	84.5	73.5	87.2	76.4	66.8	71.9	80.9	85.1	94.5	79.1
Kenya	89.1	90.9	90.0	89.9	89.6	90.0	83.4	90.9	90.9	94.2	92.8	90.0
Lao PDR	72.2	75.8	77.6	70.0	91.0	66.4	51.8	64.4	75.0	84.7	94.6	73.9
Lebanon	98.3	94.3	95.8	96.8								96.3
Lesotho	87.4	85.6	83.3	89.6	90.3	85.6	75.5	84.4	85.9	92.1	93.5	86.4
Malawi	83.7	86.6	84.4	85.7	92.1	83.8	77.0	80.3	85.0	89.1	94.6	85.1
Mali	38.7	38.4	44.9	32.5	64.3	29.9	24.8	27.4	30.5	42.0	71.1	38.6
Mongolia	62.1	81.6	69.7	73.0	71.7	71.2	63.0	70.9	75.7	72.0	75.0	71.4
Nicaragua	81.0	78.3	77.1	82.4	89.0	69.5	57.3	76.6	85.7	92.9	95.5	79.7
Niger	36.1	40.6	45.0	30.7	70.3	31.3	24.7	27.5	32.6	31.3	66.2	37.8
Palestinians in Syria	98.7	88.1	92.7	93.9	94.4	91.3						93.3
Philippines	90.8	89.3	88.5	91.7	93.7	87.5	78.5	89.9	92.5	95.0	98.5	90.0
Senegal	57.2	57.2	57.7	56.7	73.7	46.8	41.2	50.3	55.8	66.9	78.8	57.2
Sierra Leone	46.6	49.6	50.4	45.2	69.9	38.7	28.0	34.2	41.9	58.9	75.7	47.8
Somalia	15.3	23.0	20.3	17.8	27.2	11.9	6.4	6.9	17.1	26.5	43.6	18.8
Swaziland	86.5	87.0	86.2	87.3	92.4	86.1	76.2	86.2	92.1	91.8	96.3	86.8
Tanzania	40.7	72.8	53.6	57.3	72.5	51.3	39.1	45.8	52.3	63.6	82.1	55.5
Trinidad and Tobago	99.0	96.4	97.4	97.9			95.4	97.9	97.0	99.1	99.5	97.6
Uganda	86.4	90.6	88.4	88.2	89.7	88.1	82.0	83.9	89.3	92.3	93.0	88.3
Total	80.0	74.3	81.4	73.2	85.7	74.1	65.3	70.8	78.4	83.1	92.3	77.4

Averages are weighted by the population aged 7-14 years. – Congo, Dem. Rep.: Values are for ages 10-14, not ages 7-14.

and Somalia – less than half of all children went to school. Somalia has by far the lowest attendance rate with 19 percent.

Disaggregation of the data reveals a strong link between household wealth and the level of school attendance. In almost all countries, except Albania, school attendance rates increase steadily with household wealth.² In all surveys combined, 65 percent of children from the poorest household quintile attended school, compared to 92 percent of children from the richest quintile.

Boys are usually more likely to be in school than girls – a sign of gender discrimination – but in some countries the opposite can be observed. Rural children have lower attendance rates than urban children, which may be due to poverty or an insufficient supply of schools. Lastly, attendance rates are higher among 7- to 10-year-olds than among 11- to 14-year-olds. One possible explanation is that older children drop out of school to join the labour market.

Child labour is measured with an indicator used by the project on Understanding Children's Work (UCW), a joint project of the ILO, UNICEF, and the World Bank. The UCW indicator considers both economic activity and household chores and tries to distinguish between acceptable work and child labour. The latter is work by children that should be eliminated

² In the surveys, household wealth is measured with an asset index as an indicator of relative wealth, using a methodology described by Filmer and Pritchett (2001). In the Albania survey, limited information on assets was collected and the wealth indicator is therefore of inferior quality.

Table 3: Child labour, 7-14 years (percent)

Country	7-10 years	11-14 years	Male	Female	Urban	Rural	Poorest	Second	Middle	Fourth	Richest	Total
Albania	26.1	47.4	41.1	32.8	7.7	52.5	51.7	53.5	45.8	17.7	11.8	37.0
Angola	28.2	42.6	33.8	36.5	29.3	50.2	50.1	44.1	39.7	33.0	19.7	35.2
Bahrain	6.5	8.7	10.5	5.0								7.6
Bolivia	24.9	38.1	32.2	30.0	13.4	56.7	60.8	34.5	23.3	12.2	12.8	31.1
Burundi	25.5	51.5	39.2	36.8	19.7	39.3	41.1	41.8	39.2	38.3	30.9	37.9
Central African Rep.	66.4	77.0	69.2	73.0	58.3	79.5	80.8	79.9	76.6	65.6	53.3	71.1
Chad	59.3	77.9	69.4	64.4	40.1	73.5	77.2	75.4	67.7	72.5	39.5	66.9
Colombia	2.6	10.6	8.6	4.6	4.0	12.6	14.5	7.2	4.8	2.4	1.6	6.6
Comoros	37.2	50.2	41.3	44.4	44.5	42.4	48.7	42.9	44.3	37.7	39.2	42.8
Congo	31.2	38.2	33.8	35.7	17.1	51.8	50.6	55.0	32.6	17.3	13.1	34.7
Congo, Dem. Rep.	41.3	48.8	45.9	48.7	37.4	51.6	51.0	50.7	52.1	48.1	34.8	47.3
Côte d'Ivoire	41.9	50.9	44.0	48.3	26.2	65.6	63.3	62.6	52.7	33.3	16.8	46.1
Dominican Republic	9.0	20.6	17.7	10.5	11.5	17.5	20.6	15.9	11.9	12.3	8.9	14.2
Gambia	26.6	27.4	26.5	27.3	12.3	34.5	36.1	31.2	26.7	20.6	11.0	26.9
Guinea	33.8	41.8	39.0	35.5	21.9	47.4	54.4	46.0	41.7	29.9	15.8	37.2
Guinea-Bissau	68.3	70.3	68.8	69.6	43.1	85.4	89.0	81.5	82.0	63.4	33.2	69.2
India	11.4	28.1	16.9	21.2	13.5	20.8	24.9	20.7	20.5	17.1	9.9	19.0
Kenya	35.0	50.5	44.2	40.9	10.7	48.6	52.4	52.7	47.2	36.2	8.6	42.5
Lao PDR	28.3	52.4	37.9	41.1	33.9	41.9	39.5	44.1	43.5	39.6	30.0	39.5
Lebanon	5.7	14.2	12.8	7.0								10.0
Lesotho	28.2	41.1	37.6	32.2	26.6	36.8	36.8	38.7	35.3	33.0	30.4	34.9
Malawi	29.5	58.7	45.2	40.9	19.7	47.1	46.8	50.7	50.7	42.8	24.1	43.0
Mali	34.5	56.9	45.8	43.2	27.7	50.1	49.6	51.5	51.3	40.3	28.0	44.5
Mongolia	33.0	47.5	39.6	40.1	25.4	50.3	65.2	45.6	32.9	32.2	22.9	39.9
Nicaragua	7.9	25.5	19.9	12.7	10.8	22.6	28.1	19.2	14.1	9.7	4.7	16.4
Niger	73.1	84.4	80.7	74.2	58.1	81.3	82.7	79.8	81.5	82.4	63.7	77.5
Palestinians in Syria	1.1	6.1	4.9	2.3	3.1	4.6						3.6
Philippines	13.7	26.6	22.1	17.7	15.6	23.0	21.5	24.1	19.2	17.0	16.0	19.9
Senegal	30.8	40.9	38.6	32.6	28.4	40.0	45.7	39.7	37.6	27.2	22.5	35.6
Sierra Leone	74.8	82.7	79.0	76.8	70.7	81.0	84.9	84.7	79.7	75.6	65.1	78.0
Somalia	36.0	51.1	36.9	48.6	35.6	49.2	50.3	56.0	41.6	36.4	27.6	42.9
Swaziland	11.1	16.4	13.8	13.5	20.2	12.9	13.3	10.3	13.6	16.8	14.1	13.6
Tanzania	36.5	62.7	50.4	46.6	33.2	52.2	58.6	58.1	44.1	48.0	29.4	48.5
Trinidad and Tobago	2.7	6.3	5.9	3.4			8.1	3.6	3.4	3.3	4.1	4.6
Uganda	42.8	66.7	54.2	53.2	32.3	56.5	53.7	52.9	57.6	59.5	44.4	53.7
Total	17.0	33.5	23.6	25.9	16.8	27.9	31.1	27.7	26.2	22.4	14.0	24.7

Averages are weighted by the population aged 7-14 years. – Congo, Dem. Rep.: Values are for ages 10-14, not ages 7-14.

because it violates international labour standards, harms the child, or interferes with school attendance.³ Child labour is defined according to the number of hours worked and the type of activity a child engages in, depending on the age of the child, as follows.

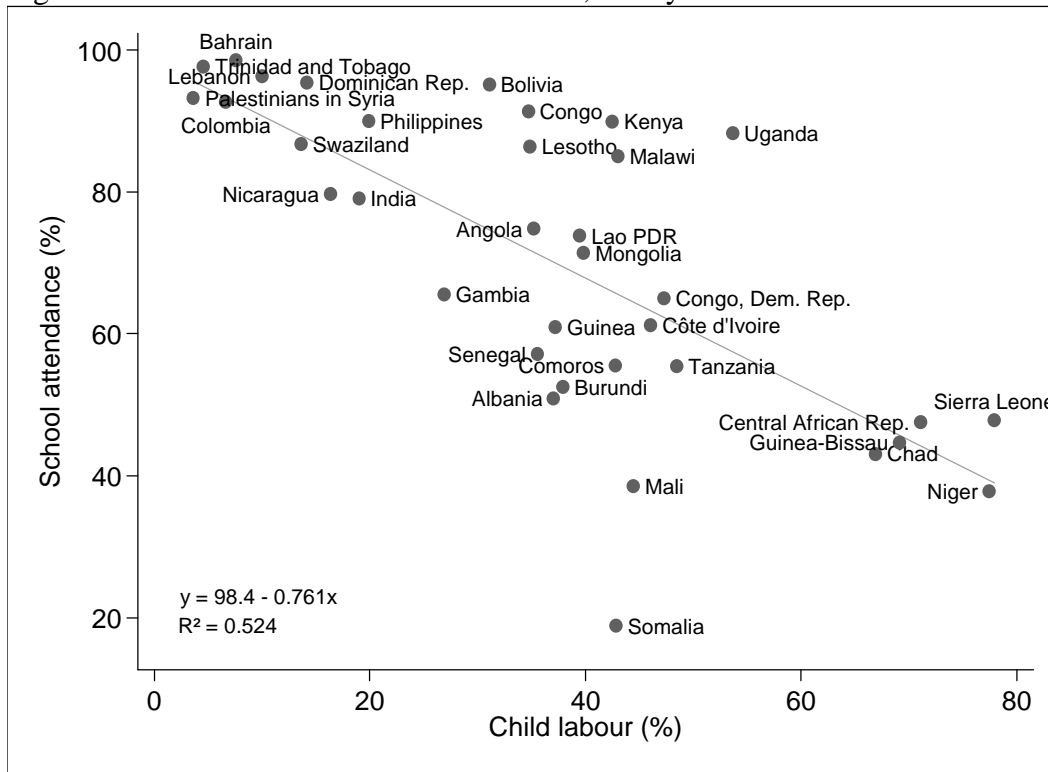
- (a) 5-11 years: any economic activity, or 28 hours or more household chores per week.⁴
- (b) 12-14 years: any economic activity (except light work only for less than 14 hours per week), or 28 hours or more household chores per week.
- (c) 15-17 years: any hazardous work, including work for 43 or more hours per week.

The present study is limited to children between 7 and 14 years of age and to simplify the analysis, child labour is defined for all ages as at least one hour of economic activity or 28 hours or more household chores per week. The assumption is that any such work interferes with school attendance. Table 3 presents the summary statistics for this child labour indicator.

³ The relevant ILO conventions are Convention 138 on the minimum age of employment and Convention 182 on the worst forms of child labour.

⁴ Current research by the UCW project investigates whether the cut-off point of 28 hours domestic work per week should be lowered to provide a more accurate measure of child labour. Preliminary results of this work are published in International Labour Office (2007).

Figure 1: Child labour and school attendance, 7-14 years



On average, 25 percent of all children between 7 and 14 years are engaged in child labour, ranging from 4 percent among Palestinians in Syria to 78 percent in Niger and Sierra Leone. In six countries, more than half of all children in this age group are child labourers: Central African Republic, Chad, Guinea-Bissau, Niger, Sierra Leone, and Uganda.

Similar to school attendance, there is a strong correlation between household wealth and child labour. Children from poorer households are much more likely to work than children from richer households. 31 percent of all children from the poorest household quintile are in child labour compared to 14 percent of children from the richest quintile. This pattern applies to all countries except Swaziland. In addition, some countries show higher child labour rates in the second or middle wealth quintile than in the poorest quintile. As Bhalotra and Heady (2003) explain, this apparent wealth paradox occurs in countries where wealth creates employment opportunities for children in a household, for example due to ownership of land or a family business.

Overall, slightly more girls than boys are engaged in child labour, 26 percent compared to 24 percent. If only economic activity had been counted, the child labour rate would have been 19 percent for girls and 22 percent for boys. The inclusion of household chores in statistics of child labour thus creates a more accurate measure of the burden of work carried by girls and boys (Gibbons, Huebler, and Loaiza 2005). In rural areas, the child labour rate is almost twice as high as in urban areas, probably due to the prevalence of agricultural employment. Lastly, older children work more than younger children.

The scatter plot in Figure 1 demonstrates the trade-off between child labour and school attendance. Countries with low child labour rates typically have high school attendance rates and vice versa. A linear regression shows that a 10 point increase in child labour is associated with a 7.6 point decrease in school attendance at the national level.

3. Regression analysis

3.1 Model

For the purpose of testing the individual determinants of child labour and school attendance, in particular the role of household wealth, a theoretical framework by Basu and Van (1998) is adopted. Their seminal paper describes a model of the household in which the parents, who decide whether children work, go to school, or enjoy leisure, are altruistically concerned with the welfare of their children. This assumption is based on Basu and Van's observation that even in very poor countries the children of the non-poor rarely work.

In the altruistic model, household wealth is the most important factor in the decision to send children to school or to work. Child labour arises only if adult wages are insufficient to sustain the household. However, this decision is also influenced by other factors, including:

- Characteristics of the child: age, sex;
- Characteristics of the parents: presence in the household, age, educational attainment, employment, marital status;
- Composition of the household: age and sex of the household head, number and age of household members;
- Location of the household: urban or rural area, geographic region within a country;
- Characteristics of schools: distance, cost, and quality of education;
- Characteristics of the economy: share of agriculture, presence of industrial establishments;
- Institutions (legal and other);
- Social and cultural norms, religious beliefs.

The available data from the MICS and DHS limit the analysis to household-level determinants of the supply of labour and the demand for education. Data on the demand for labour and the supply side of the education system are not available. It is, for example, not possible to test how a household's distance from the nearest school affects the schooling decision of the parents. The demand for labour can be affected by the structure of the local economy and the degree of enforcement of labour standards, among other things, factors for which the MICS and DHS surveys provide no information.

The determinants of child labour and school attendance are tested with a bivariate probit regression for each country in the study. The set of variables includes two dependent variables and 23 independent variables.

The two dependent variables indicate whether a child in the sample attends school or is in child labour. School attendance refers to attendance at the time of the survey. Child labour is measured as a combination of economic activity and household chores, as defined in Section 2. Economic activity is considered regardless of the number of hours worked. Household chores are only counted if the child does this type of work for at least 28 hours per week.

The set of explanatory variables includes the age and sex of the child and information on whether the child's parents live in the same household. Five variables describe the age, sex, and educational attainment of the household head. Educational attainment is indicated as primary,

secondary, or higher education. Household heads who have no formal education serve as the reference category for the three educational attainment variables.⁵

Eight variables describe the age composition and size of the household. These variables measure the number of household members aged 0 to 6 years, 7 to 14 years, 15 to 59 years, and 60 years or older. For all four age groups the number of household members is further disaggregated by sex.

The last group of explanatory variables describes the area of residence (urban or rural) and the level of household wealth, measured by the asset index. Children from households in the poorest wealth quintile are the reference category for the four wealth variables.

Five of the 35 surveys listed in Tables 1 to 3 have an incomplete set of explanatory variables and are therefore excluded from the regression analysis. The surveys for Bahrain, Lebanon, and Palestinians in Syria have no data on household wealth. In the data from Trinidad and Tobago the area of residence is not identified. In the data from the Philippines the education of the household head is unknown because the survey collected information on education only for household members up to 17 years of age.

Table 4 lists summary statistics for the dependent and independent variables across the 30 remaining countries. Most variables – except the ages of the child and household head, and the number of household members in different age groups – are coded as binary, with the values 0 or 1. For example, if a child is male, the respective variable is set to 1 and 0 otherwise. The number of observations in the regression analysis is the number of children between 7 and 14 years, ranging from about 3,300 in several smaller surveys to over 100,000 in India. Compared to the total number of observations, the number of missing values, an indicator of data quality, is relatively small.⁶

The expected effects of the explanatory variables on school attendance and child labour are as follows. Depending on the country and the typical entrance age into the education system, school attendance may rise or fall with age, while child labour is likely to increase with age. In many countries boys are more likely to be in school than girls due to gender discrimination. Across the countries in the sample, girls appear to have a slightly higher likelihood of working, once household chores are taken into consideration.

Under the assumption that parents are altruistically concerned with the welfare of their children the presence of the mother and father in the household is expected to have a positive effect on the likelihood of school attendance and a negative effect on the likelihood of work. In countries where the extended family plays an important role, for example in many parts of Africa, this effect may be diminished.

The possible effect of the age and sex of the household head is not clear. Household heads who are too old to work themselves may rely on children to support the household. Children, especially girls, from female-headed households may have an increased probability of being in school.

Increased educational attainment of the household head is assumed to be linked to increased school attendance rates of children. This link can work through two channels: educated

⁵ Because of data limitations it is not possible to identify the parents' level of education in most MICS surveys conducted around 2000, but this information was collected during the 2005-2006 round of surveys.

⁶ The maximum number of male household members aged 7 to 14 years is 62. Such large numbers can only be found in Senegal and they are most likely cases of *talibés*, young boys who live away from their families in search of a religious education and who are often forced to beg in the streets (Perry 2004). Without Senegal, the maximum value for this observation is 25.

Table 4: Data summary, variables in regression analysis, children 7-14 years

Variable	Min.	Max.	Mean	Standard error	95% confidence interval of mean		Observations		Missing values	
							Min.	Max.	Min.	Max.
School	0	1	0.7658	0.0021	0.7616	0.7699	3,367	107,923	0	1,700
Work	0	1	0.2503	0.0023	0.2458	0.2547	3,374	107,910	0	1,713
Age	7	14	10.3728	0.0115	10.3502	10.3953	3,374	109,623	0	0
Age squared	49	196	112.6935	0.2424	112.2183	113.1687	3,374	109,623	0	0
Male	0	1	0.5064	0.0026	0.5013	0.5115	3,374	109,623	0	136
Mother in household	0	1	0.8821	0.0018	0.8786	0.8856	3,356	109,348	0	288
Father in household	0	1	0.8187	0.0021	0.8145	0.8228	3,351	109,229	0	465
HH head's age	0	98	45.3999	0.0645	45.2735	45.5262	3,374	109,446	0	556
HH head female	0	1	0.1173	0.0018	0.1138	0.1208	3,374	109,623	0	0
HH head has no formal ed.*	0	1	0.4292	0.0023	0.4246	0.4337	3,328	107,744	0	0
HH head has primary education	0	1	0.2277	0.0022	0.2235	0.2319	3,328	107,744	0	0
HH head has secondary education	0	1	0.2881	0.0021	0.2840	0.2922	3,328	107,744	0	0
HH head has higher education	0	1	0.0550	0.0011	0.0530	0.0571	3,328	107,744	0	0
Male HH members 0-6 years	0	13	0.6075	0.0045	0.5987	0.6164	3,374	109,623	0	0
Female HH members 0-6 years	0	12	0.5749	0.0045	0.5660	0.5838	3,374	109,623	0	0
Male HH members 7-14 years	0	62	1.2285	0.0059	1.2170	1.2399	3,374	109,623	0	0
Female HH members 7-14 years	0	20	1.2070	0.0054	1.1965	1.2176	3,374	109,623	0	0
Male HH members 15-59 years	0	22	1.5683	0.0058	1.5569	1.5797	3,374	109,623	0	0
Female HH members 15-59 years	0	21	1.6276	0.0055	1.6170	1.6383	3,374	109,623	0	0
Male HH members 60+ years	0	4	0.1719	0.0019	0.1681	0.1757	3,374	109,623	0	0
Female HH members 60+ years	0	5	0.1717	0.0019	0.1679	0.1755	3,374	109,623	0	0
Urban	0	1	0.2738	0.0022	0.2694	0.2781	3,374	109,623	0	106
Poorest wealth quintile*	0	1	0.2097	0.0021	0.2056	0.2138	3,374	108,776	0	0
Second wealth quintile	0	1	0.2150	0.0021	0.2108	0.2192	3,374	108,776	0	0
Middle wealth quintile	0	1	0.2048	0.0021	0.2007	0.2088	3,374	108,776	0	0
Fourth wealth quintile	0	1	0.1990	0.0021	0.1950	0.2031	3,374	108,776	0	0
Richest wealth quintile	0	1	0.1715	0.0020	0.1676	0.1754	3,374	108,776	0	0

*Reference category, not included in regression analysis. – Averages are weighted by the population aged 7-14 years. Data for 30 countries.

adults are more likely to recognize the value of education and to send the children in their care to school, and they are more likely to have higher incomes, which would give them the means to afford education for the children in their household.

The size and age composition of the household can also affect the decision between work and school. In households with a large number of infants and young children, older children, in particular girls, may be asked to care for their younger brothers and sisters. A higher number of household members above 60 years of age increases the dependency ratio and thus the burden on household members who are of working age, which in turn may cause more children between 7 and 14 years to work and not attend school.

Urban children are usually more likely to be in school and less likely to work than rural children. Children living in urban areas may benefit from a better developed education infrastructure. Children from rural and thus largely agricultural areas, on the other hand, are not only less likely to live close to a school, they are also more likely to be employed on a farm.

Lastly, the descriptive analysis in Section 2 revealed a clear effect of household wealth, shown in Tables 2 and 3. Increasing household wealth is associated with higher school attendance rates and lower child labour rates. The role of household wealth is of particular importance for the policy recommendations in Section 4.

The relative contribution of these factors to the likelihood of school attendance and child labour is identified with the regression analysis that follows.

3.2 Regression results

For each country, a separate regression was estimated for the sample of children aged 7 to 14 years. The effect of the explanatory variables on the probability of school and work was

estimated simultaneously with a bivariate probit model. Instead of regression coefficients, marginal effects were calculated. In the case of binary independent variables the marginal effect is the change in the dependent variable following a change in the independent variable from 0 to 1. For continuous variables (age, number of household members) the marginal effect is evaluated at the mean of the independent variable and expresses the effect a one-unit increase at that mean. All regression results were obtained with Stata version 10 (StataCorp 2007).

The results of the 30 regressions are summarized in Tables 5 and 6 to simplify their interpretation. Complete regression results for each country are listed in the Annex. Tables 5 and 6 indicate in how many countries a particular variable had a positive or negative effect on school attendance and child labour and whether this effect was statistically significant at the 5 percent level. The last three columns in Tables 5 and 6 list the mean of the significant marginal effects and the 95 percent confidence interval for the mean.

The statistically significant marginal effects are also plotted in Figure 2. Each point represents the marginal effect of an independent variable on school attendance or child labour in one country. The mean marginal effects and the confidence intervals for the means from Tables 5 and 6 are also indicated. The distribution of the marginal effects in Figure 2 demonstrates that the effects of the independent variables on the likelihood of school attendance and child labour are typically opposed, so that the two plots are near mirror images of each other.

Table 5 shows that age is always positively correlated with school attendance. In 29 of 30 countries the marginal effect is statistically significant, with a mean of 0.21. This means that older children are, on average, 21 percentage points more likely to be in school. Table 6 shows that age also has a positive effect on the probability of child labour. In 22 regressions the marginal effect is statistically significant, with a mean value of 0.13.

Age squared has a negative and statistically significant marginal effect on school attendance in 29 countries and on child labour in 17 countries. This means that the rate of increase in the probability of school and work decreases with age.

The effect of gender is ambiguous. In 16 countries boys are more likely to be in school and in 10 countries they are more likely to work. In 4 countries girls have an increased likelihood of school attendance and in 8 countries they are more likely to work. The average marginal effect of being male on school attendance is 7 points, which confirms the result from the descriptive analysis that boys are typically more likely to go to school. The average marginal effect of being male on the probability of work is 0.6 points, which means that across the sample of 30 countries boys and girls are almost equally likely to work. This result would not have been obtained without the inclusion of household chores.

The marginal effect of the presence of the mother and father in a household has the expected sign for most countries in the school and work regressions, but in roughly half of all school regressions (Table 5) and more than three quarters of all child labour regression (Table 6) the effect is statistically insignificant. In the remaining countries, the likelihood of school attendance is 5 to 6 percentage points higher if the mother or father live in the same household as the child. In comparison, the likelihood of child labour is reduced by 5 to 7 points on average if a child lives with his or her parents.

The age of the household head is largely insignificant as a determinant of school or work and the mean marginal effect across the individual regressions is close to zero.

The gender of the household head does have an effect, on the other hand. If the household head is female, children have an increased probability of being in school and a decreased

Table 5: Marginal effects on school attendance, children 7-14 years

Explanatory variable	Countries with positive and significant marginal effect*	Countries with negative and significant marginal effect*	Countries with positive and insignificant marginal effect*	Countries with negative and insignificant marginal effect*	Significant marginal effects*		
					Mean	95% CI lower bound	95% CI upper bound
Age	29	0	1	0	0.213	0.163	0.264
Age squared	0	29	0	1	-0.010	-0.012	-0.008
Male	16	4	6	4	0.074	0.040	0.108
Mother in household	13	1	14	2	0.055	0.032	0.078
Father in household	15	2	12	1	0.048	0.028	0.068
HH head's age	10	0	11	9	0.002	0.001	0.003
HH head female	13	0	11	6	0.078	0.062	0.095
HH head has primary education	24	0	6	0	0.132	0.099	0.165
HH head has secondary education	29	0	1	0	0.180	0.137	0.223
HH head has higher education	24	0	5	0	0.219	0.159	0.280
Male HH members 0-6 years	0	6	5	19	-0.027	-0.033	-0.021
Female HH members 0-6 years	0	9	5	16	-0.016	-0.021	-0.011
Male HH members 7-14 years	5	5	8	12	0.001	-0.018	0.021
Female HH members 7-14 years	6	3	11	10	0.007	-0.013	0.027
Male HH members 15-59 years	2	4	7	17	-0.001	-0.019	0.017
Female HH members 15-59 years	9	0	12	9	0.023	0.018	0.028
Male HH members 60+ years	1	3	11	15	-0.047	-0.130	0.037
Female HH members 60+ years	10	0	13	7	0.059	0.036	0.081
Urban	9	5	6	10	0.074	0.005	0.142
Second wealth quintile	17	0	9	4	0.082	0.041	0.123
Middle wealth quintile	22	0	8	0	0.104	0.074	0.134
Fourth wealth quintile	27	0	3	0	0.139	0.105	0.173
Richest wealth quintile	28	0	2	0	0.196	0.148	0.243

*5 percent level of significance. – CI is the confidence interval. Data for 30 countries.

Table 6: Marginal effects on child labour, children 7-14 years

Explanatory variable	Countries with positive and significant marginal effect*	Countries with negative and significant marginal effect*	Countries with positive and insignificant marginal effect*	Countries with negative and insignificant marginal effect*	Significant marginal effects*		
					Mean	95% CI lower bound	95% CI upper bound
Age	22	0	7	1	0.128	0.099	0.158
Age squared	0	17	4	9	-0.005	-0.006	-0.004
Male	10	8	5	7	0.006	-0.024	0.036
Mother in household	0	5	6	19	-0.051	-0.067	-0.035
Father in household	0	3	14	13	-0.067	-0.092	-0.042
HH head's age	5	1	6	18	0.002	0.001	0.004
HH head female	0	5	11	14	-0.053	-0.077	-0.029
HH head has primary education	4	4	9	13	0.017	-0.055	0.090
HH head has secondary education	1	10	4	15	-0.073	-0.117	-0.029
HH head has higher education	0	12	6	11	-0.143	-0.216	-0.070
Male HH members 0-6 years	7	0	17	6	0.025	0.017	0.033
Female HH members 0-6 years	7	0	17	6	0.022	0.010	0.033
Male HH members 7-14 years	2	2	18	8	0.000	-0.044	0.044
Female HH members 7-14 years	1	4	13	12	-0.013	-0.052	0.026
Male HH members 15-59 years	2	6	11	11	-0.011	-0.028	0.006
Female HH members 15-59 years	2	9	6	13	-0.010	-0.026	0.005
Male HH members 60+ years	1	1	15	13	-0.016	-0.531	0.499
Female HH members 60+ years	2	3	17	8	-0.020	-0.107	0.066
Urban	1	22	2	5	-0.167	-0.210	-0.123
Second wealth quintile	1	8	12	9	-0.061	-0.113	-0.010
Middle wealth quintile	0	9	6	15	-0.110	-0.165	-0.055
Fourth wealth quintile	1	16	4	9	-0.109	-0.145	-0.074
Richest wealth quintile	0	21	1	8	-0.193	-0.228	-0.157

*5 percent level of significance. – CI is the confidence interval. Data for 30 countries.

probability of working. The average marginal effect on school attendance is 8 percentage points, and the average effect on child labour is -5 points.

The educational attainment of the household head is highly correlated with children's school attendance rates. The marginal effect of living with a household head who has primary, secondary, or higher education is always positive, and statistically significant effects are observed in 24 to 29 of all countries. Compared to children living in a household whose head has no formal education, the probability of school attendance is increased by 13 percentage points on average if the household head has primary education. For secondary and higher education, the average marginal effects are 18 and 22 percentage points, respectively.

The education of the household head is also highly correlated with child labour. As educational attainment increases, the probability that a child works is decreased, but this effect is more pronounced for household heads with at least secondary education. In the Central African Republic, Chad, Guinea, and Malawi, children living with a household head with primary education are more likely to work, perhaps because education enables the household head to own a family farm or business in which children can be employed. In more than two thirds of all countries the marginal effect of the primary education variable on the probability of child labour is statistically insignificant. If the household head has secondary or higher education, children are typically less likely to work. For secondary education the average marginal effect is -7 percentage points, for higher education the average is -14 points.

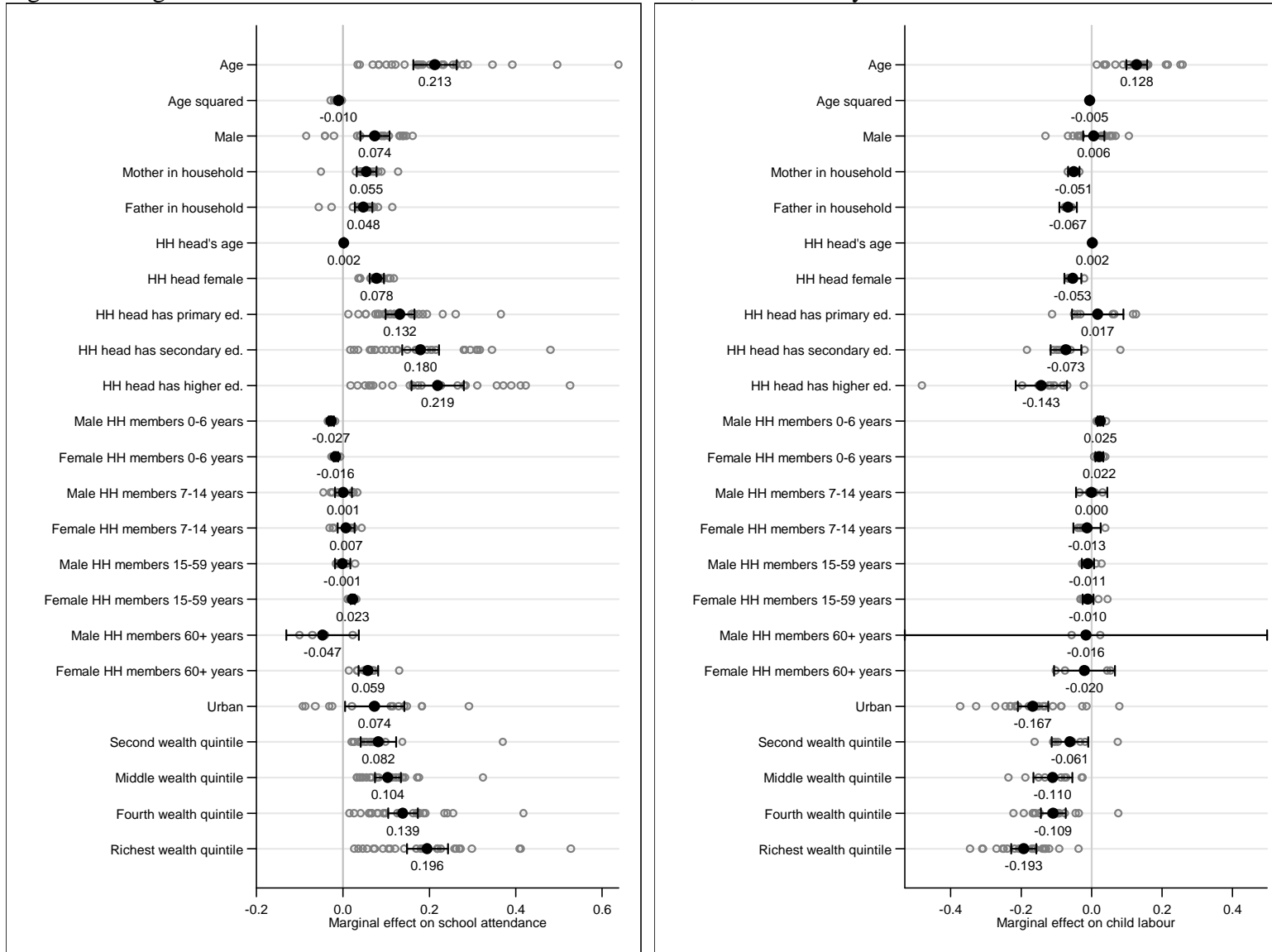
The effect of household size and age composition is often small and insignificant. The clearest effect can be observed for the number of children below 7 years of age in a household. One additional male child aged up to 6 years decreases the likelihood of school attendance by almost 3 percentage points on average, but the marginal effect is only statistically significant in 6 countries. One additional female child aged up to 6 years decreases the likelihood of school attendance by 1.6 percentage points, the average from 9 countries with a statistically significant marginal effect. The probability of child labour is increased by 2.2 to 2.5 percentage points if there is an additional boy or girl below 7 years in the household, but this effect is only statistically significant in 7 countries. Thus, when the dependency ratio in a household increases in certain countries, children are withdrawn from school to save money, to care for infant household members, or to do other work.

The results for the number of household members between 7 and 14 years of age are inconclusive. The average marginal effects on school attendance and child labour are near zero and the 95 percent confidence interval covers both positive and negative values.

An increase in the number of household members of working age, 15 to 59 years, has a small negative effect on the probability of child labour, about -1 percentage points, an indicator of the substitutability between adult and child labour. The effect on school attendance is less clear. The number of male household members between 15 and 59 years appears to have little effect on the likelihood of school attendance across the 30 countries. An increase in the number of women between 15 and 59 years, on the other hand, increases the probability of being in school by more than 2 percentage points on average. Children thus benefit if women of working age are present in the household.

The positive effect of living with older women is also visible in the results for the number of female household members aged 60 or more years. In 10 countries, the likelihood of school attendance increases by 6 percentage points on average with an increase in the number of older women in the household. In the remaining countries this variable has no statistically significant effect on school attendance. The number of male household members in the oldest age group has

Figure 2: Marginal effects on school attendance and child labour, children 7-14 years



Only marginal effects that are statistically significant at the 5 percent level are plotted. Filled markers and lines indicate the mean marginal effect and the 95 percent confidence interval for the mean. Data for 30 countries.

no effect on school attendance in most countries; in the remaining countries the effect of this variable can be positive or negative but the mean marginal effect has a large confidence interval (see Figure 2).

With regard to child labour, the effect of the number of household members aged 60 years and older is not clear. In the case of male household members over 60, the effect is statistically insignificant in most countries. The number of female household members in the same age group has a statistically significant effect in 5 countries, but in 2 countries the marginal effect is positive and in 3 countries it is negative. Older women may perform tasks that would otherwise be performed by children, especially girls, but at the same time a higher number of elderly household members can increase the economic burden on younger household members, including children.

The area of residence is significantly linked to the probability of school attendance in about half of all countries. On average, children from urban areas are 7 percentage points more likely to be in school than children from rural areas. The effect on child labour is much stronger and unambiguous. In 22 of the 30 countries, a negative and significant marginal effect for living in an urban area is observed, one country has a positive marginal effect, and the overall average is -17 percentage points. Children in rural areas are much more likely to work and less likely to be in school.

The effect of household wealth is as expected and confirms the poverty hypothesis. School attendance rates increase with household wealth and child labour rates decrease. In countries where the marginal effect of the wealth variables on the likelihood of school attendance is statistically significant, it is always positive. The average marginal effect ranges from 8 percentage points for the second wealth quintile to 20 points for the richest quintile. This means that children from the richest quintile are, on average, 20 percentage points more likely to be in school than children from the poorest quintile. The marginal effect of belonging to the top quintile on school attendance is positive and statistically significant in all but two countries. The largest effect of household wealth is observed in Chad, Somalia, and Tanzania, where children from the richest quintile are 40 to 50 percentage points more likely to be in school than children from the poorest quintile.

The effect of household wealth on child labour is statistically significant in fewer countries but the significant effects are almost always negative, as expected. For the total sample, the average marginal effect ranges from -6 percentage points for children from the second quintile to -19 points in the richest quintile. The strongest effect is observed in Guinea-Bissau, where children from the top household quintile are 35 percentage points less likely to work than children from the bottom quintile. In two countries, Congo and Uganda, the regressions yield a positive marginal effect on the probability of child labour for some groups. These cases can be explained by the wealth paradox mentioned in Section 2.

To summarize the regression results for the 30 countries, household wealth and education of the household head have the strongest effect on school attendance and work by children aged 7 to 14 years. School attendance rates increase with wealth and educational attainment of the household head, while child labour rates fall.

Boys are more likely to attend school, and older children are more likely to work and attend school. Urban children have higher school attendance rates and lower child labour rates than rural children. Children who live with their parents tend to be in school more and work less than children living without parents. An increase in the number of very young household members below 7 years of age decreases the probability of school attendance and increases the

probability of work. An increase in the number of household members of working age, 15 to 59 years, is associated with a decrease in the child labour rate. The presence of women aged 60 years and older in a household has a positive effect on school attendance.

4. Policy recommendations

Laws aimed at compulsory schooling and at the elimination of child labour are a part of the legal framework in most countries and yet, millions of children worldwide continue to do work that interferes with their education and exposes them to health hazards. The historical experience of Europe and the United States and the current situation in many parts of the developing world have shown that legislation alone is not sufficient to eliminate child labour. To develop effective policies it is necessary to understand why children work so that the underlying causes can be addressed.

The regression analysis in Section 3 has identified the most important determinants of school attendance and child labour based on data collected at the level of the household. The main finding is the role of household wealth for the decision between work and school. According to the regression results, children from poorer households are more likely to work and less likely to attend school than children from richer households. The analysis provides strong support for the poverty hypothesis that suggests that parents only send their children to work if the additional labour is needed to supplement household income because consumption needs cannot be met from other sources.

Another important finding is the strong effect of the educational attainment of the household head. With an increasing level of education of the household head, the probability of school attendance for children in the household rises while the probability of child labour falls. This intergenerational effect of education underlines the importance of educating today's children because it increases the probability that the following generation will also attend school.

The effect of other explanatory variables – presence of the parents, age and sex of the household head, household size and composition, area of residence – is not uniform across countries and must be analyzed at the national level for each country individually. In addition to the variables covered by the regression analysis, there are factors specific to some countries, like the caste system in India and Nepal, that also have a strong influence on access to the education system (World Bank and DFID 2006).

How should policy makers approach the trade-off between school and work based on the findings of this study? Some authors have argued that laws against child labour are less effective than policies that target the education system (Wasserman 2000). Children will continue to work, whether legally or not, if their labour is needed to augment household income or if there is no easy access to education of good quality. Dessy and Pallage (2005) suggest that even in the case of the worst forms of child labour such as prostitution a ban is ineffective if the underlying causes are not addressed. Income transfers to poor families and easier access to schools must therefore be at the heart of policies aimed at an increase in school attendance and a reduction of child labour.

Making education truly free is a first step toward increased enrolment rates. To pursue this goal, UNICEF and the World Bank launched the School Fee Abolition Initiative in 2005. The poor are highly sensitive to school fees because such fees can represent a large share of household income. When school fees are eliminated, enrolment rates typically grow more quickly among children from poor households than among the non-poor (Craissati 2007). Over

the past decade, several countries have abolished school fees, among them Cameroon, Kenya, Lesotho, Malawi, Uganda, Tanzania, and Zambia. These countries experienced sometimes dramatic increases in school attendance, a testimony to the strong desire of parents to send their children to school as long as education is affordable. As an unintended consequence of school fee abolition the quality of education may drop due to overcrowding. Fee abolition must therefore be accompanied by complementary measures like the training and recruitment of additional teachers (UNESCO 2005; Bentaouet Kattan 2006).

School feeding programmes like those implemented by the World Food Programme reduce the cost of education by lowering household expenses on food and thus provide an incentive for parents to send their children to school (World Food Programme 2006). Using schools as a tool for the delivery of social services like the provision of basic health care can serve as a further incentive for school attendance.

Even if the classes themselves are free and meals are provided in the school, parents face other costs associated with schooling, for example for transportation and school supplies. The opportunity cost of education in the form of forgone earnings from the child must also be considered.

Cash transfers to poor households, one way to help families bear the direct and indirect costs of sending children to school, have been tested successfully in several countries over the past years, mainly in Latin America. In these programmes poor families receive cash payments, often under the condition that their children regularly attend school. Examples are the Programa de Educación, Salud y Alimentación (PROGRESA, renamed Oportunidades in 2002) in Mexico, the Programa Nacional do Bolsa Escola and Programa de Erradicação do Trabalho Infantil (PETI) in Brazil, Superémonos in Costa Rica, and Food for Education in Bangladesh. These programmes combine social assistance to alleviate poverty in the short term with long-term social development.

In a review of cash transfer programmes in seven Latin American countries, Bouillon and Tejerina (2006) summarize the advantages of such programmes compared to in-kind transfers or price subsidies. Cash transfers have lower transaction costs, families can decide how they will use the available funds, and the transfers address multiple needs such as nutrition, health, and education. Cash transfers have lower inclusion errors than programmes like infrastructure investment, and they can be easily modified as the target population changes.

Handa and Davis (2006) describe the experience of Brazil, Colombia, Honduras, Jamaica, Mexico, and Nicaragua. Effects of the transfer programmes in these countries include increased school enrolment, improved nutrition, and increased participation in preventive health care programmes. School enrolment increased especially among girls. On the other hand, child labour did not decrease significantly. This indicates that children out of school who used to work exclusively did not stop working entirely after their families started to receive cash transfers but instead began to combine work and school.

Denes (2003) reviews the literature on the Bolsa Escola programme in Brazil. The programme has existed at the national level since 1999 but had been tested at the subnational level since 1995. The existing evidence points at reduced dropout rates, decreased employment rates of children, and increased income among the poorest 10 percent of the population. In addition, the programme has led to improvements in health by enabling purchases of basic necessities like food and medicine.

The impact of Superémonos, a conditional transfer programme in Costa Rica, is examined by Duryea and Morrison (2004). The programme has led to increased school

attendance and performance, although the evidence for the latter effect is weak. The programme is not shown to decrease child labour.

Sedlacek et al. (2005) conclude that income transfers would not lead to a decrease of child labour in Brazil and Nicaragua because in these countries the incidence of child labour does not vary with household wealth. On the other hand, Ilahi, Orazem, and Sedlacek (2005) show for the case of Brazil that continued school attendance lowers the likelihood of poverty as an adult, even for children who work while they are in school. Policies that delay exit from school therefore have long-term benefits even if they cannot fully prevent work by children.

Bando, Lopez-Calva, and Patrinos (2006) study the effect of the Mexican PROGRESA programme on child labour and school attendance among the indigenous population of Mexico. After participation in the programme, the child labour rate decreased among indigenous children and their educational attainment increased.

An example for a cash transfer programme in Africa is the Child Support Grant that was introduced in South Africa in 1998. In this programme, single caretakers whose income is below a certain threshold receive a monthly cash payment for every child below the age of 13 years. Current plans envision an extension of the programme to all children below 18 years of age by 2015. The impact of the programme has not been studied but limited evaluations show that it is well targeted at poor households (Barrientos and DeJong 2004).

Ravaillon and Wodon (2000) examine the effects of a targeted enrolment subsidy in rural Bangladesh and find that the increase in schooling is greater than the decrease in child labour. For Thailand, Tzannatos (2003) shows that the response to education incentives is greater among poor households and those headed by the less educated. Overall enrolment increases are likely to be small but according to Tzannatos such a policy can be justified by the welfare gains among the poorest households in the country.

Some caveats must be mentioned. Morley and Coady (2003) emphasize in a review of cash transfer programmes that their success depends on the precise targeting of subsidies. Developing countries often have limited financial resources and it is therefore necessary to maximize the social return of such programmes. In addition, Rosati and Rossi (2003) caution that subsidies may not have an effect on the poorest and most uneducated households if they are not large enough to change the propensity to send children to work. Duryea et al. (2005) go further by suggesting that income transfers should not only target families with children that are currently working because child labour often occurs intermittently. Schubert and Slater (2006) emphasize that the conditional cash transfer programmes from Latin America cannot serve as a blueprint for similar programmes in Africa due to socio-cultural and political differences between the two regions. Kakwani, Soares, and Son (2006) argue that targeting linked to household income is too costly in the context of Africa and that regional targeting, for example of rural children, is therefore a preferred option. An additional concern is that some groups of children, such as orphans and street children, are often not reached by transfers to poor households. For these children, other forms of support are required.

In summary, existing evidence suggests that cash transfers are an effective tool to increase school attendance and, to a lesser extent, reduce child labour, as long as they are well targeted. Targeting also helps to reduce the cost of cash transfer programmes, as a summary by Barrientos and DeJong (2004) demonstrates. The joint budget of Brazil's Bolsa Escola and PETI programmes amounts to roughly 0.2 percent of GDP. The cost of PROGRESA in Mexico is below 0.5 percent of GDP. Projections for South Africa indicate that the cost of its Child Support Grant will amount to up to 2 percent of GDP by 2015.

The cost of transfer programmes cannot be seen in isolation, however. Cash transfers raise the demand for education and therefore it is necessary to increase the supply of schools and related services, including transportation, to meet the higher demand, especially in areas that are currently underserved. Countries in Latin America, where cash transfer programmes are most common, usually have a well-developed education infrastructure but in many regions of Africa the supply of schools and teachers is insufficient.

A report by UNESCO on education finance points out that public spending on education is currently concentrated in developed countries. The United States alone accounts for more than one quarter of the global education budget and countries like France, Germany, Italy, and the United Kingdom each have education budgets that exceed the spending on education in all of Sub-Saharan Africa. Sub-Saharan Africa is home to 15 percent of the world's school-age population but combined spending on education by national governments in the region amounts to only 2.4 percent of the global education budget (UNESCO Institute for Statistics 2007).

Poor countries are unable to finance the massive spending for school construction and teacher training that is necessary to bring schools to all parts of a country and instead rely on external aid. Possible sources of funding include loans and grants from multilateral organizations, bilateral aid, and funds from non-governmental organizations (NGOs). One venue for the delivery of financial aid is the Education for All – Fast-Track Initiative (FTI) that was launched in 2002. The FTI unites national governments, international organizations like UNESCO and the World Bank, and development agencies with the objective to reach the Millennium Development Goal of universal primary education by 2015. The FTI focuses on the world's poorest countries and its goals include more efficient aid delivery through donor collaboration and harmonization, sound education sector policies, and adequate and sustainable financing for education (World Bank 2006).

With the help of the FTI and other initiatives, poor countries can raise the resources necessary to finance cash transfer programmes and investments in the education infrastructure in order to increase school enrolment rates.

5. Conclusion

Drawing on household survey data from 35 developing countries, this study has highlighted the trade-off between child labour and school attendance. 78 percent of all children between 7 and 14 years of age were attending school at the time of the surveys, while 25 percent of all children in this age group were in child labour. A regression analysis identified poverty as the most important determinant of low school attendance and high child labour rates. The education of the household head was also found to be an important factor in the decision between work and school for children, underscoring the intergenerational benefits of education.

Many countries are still far from the Millennium Development Goal of universal primary education. Programmes that aim to reduce the incidence of child labour and increase school attendance rates must be tailored to the specific situation of each country and encompass legal, economic and social policies. Child labour legislation is important as a means to protect children from the worst forms of child labour by setting minimum standards and by raising awareness of the rights of children, but such legislation is not sufficient to reduce the number of working children as long as the underlying causes are not addressed.

Targeted cash transfers to poor families have been tested in several countries and the evidence has shown them to be an effective tool in the struggle against poverty. Cash transfers

can raise the income of poor households above the subsistence level, thus reducing the need to rely on child labour and making it possible for children to attend school.

The increased demand for schooling must be met by a sufficient supply of schools and teachers, which requires additional financial resources. Although the cost of cash transfer programmes themselves is relatively low, poor countries from Sub-Saharan Africa, where school attendance is lower than in any other region, are unlikely to have sufficient funds for social transfer programmes and for investments in education infrastructure at their disposal. The Education for All – Fast Track Initiative is one mechanism that helps poor countries raise the required financial resources. Only through joint and increased efforts by the international community can the world come closer to the goal of universal primary education by 2015.

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Annex: Bivariate probit regression, marginal effect on probability to attend school or do child labor, children 7-14 years

	Albania		Angola		Bolivia		Burundi		Central African Rep.		Chad	
	School p=0.510	Work p=0.304	School p=0.776	Work p=0.339	School p=0.982	Work p=0.263	School p=0.533	Work p=0.365	School p=0.472	Work p=0.729	School p=0.410	Work p=0.690
Age	0.233*** (0.0414)	0.212*** (0.0474)	0.174*** (0.0247)	0.161*** (0.0255)	0.034*** (0.0083)	0.060* (0.0358)	0.393*** (0.0346)	0.133*** (0.0279)	0.234*** (0.0201)	0.105*** (0.0154)	0.263*** (0.0438)	0.148*** (0.0386)
Age squared	-0.010*** (0.0019)	-0.007*** (0.0022)	-0.008*** (0.0012)	-0.006*** (0.0012)	-0.002*** (0.0004)	-0.001 (0.0017)	-0.016*** (0.0016)	-0.003** (0.0013)	-0.011*** (0.0010)	-0.003*** (0.0008)	-0.011*** (0.0020)	-0.005** (0.0019)
Male	0.035* (0.0179)	0.106*** (0.0261)	0.039*** (0.0122)	-0.030** (0.0123)	0.007 (0.0048)	0.029 (0.0207)	0.079*** (0.0184)	0.030* (0.0164)	0.133*** (0.0134)	-0.040*** (0.0108)	0.139*** (0.0254)	0.053*** (0.0178)
Mother in household	0.049 (0.1239)	-0.146 (0.1032)	0.032 (0.0204)	-0.014 (0.0235)	0.011 (0.0088)	-0.010 (0.0391)	0.128*** (0.0303)	0.001 (0.0260)	-0.022 (0.0169)	-0.001 (0.0172)	0.015 (0.0320)	-0.017 (0.0224)
Father in household	0.068 (0.0882)	0.037 (0.0829)	0.071*** (0.0207)	-0.005 (0.0228)	0.024** (0.0100)	-0.041 (0.0434)	0.115*** (0.0379)	0.003 (0.0324)	0.072*** (0.0166)	0.012 (0.0141)	0.025 (0.0345)	0.015 (0.0288)
HH head's age	-0.000 (0.0023)	-0.003* (0.0016)	0.002** (0.0008)	-0.001 (0.0010)	-0.000 (0.0003)	-0.000 (0.0016)	-0.001 (0.0014)	-0.001 (0.0012)	0.002** (0.0007)	0.000 (0.0009)	0.003*** (0.0012)	-0.000 (0.0009)
HH head female	-0.013 (0.0737)	0.049 (0.0582)	0.094*** (0.0213)	0.011 (0.0265)	0.006 (0.0059)	-0.003 (0.0476)	0.093** (0.0404)	-0.018 (0.0404)	0.106*** (0.0245)	0.005 (0.0194)	0.093** (0.0426)	-0.007 (0.0326)
HH head has primary ed.	0.029 (0.0760)	0.000 (0.0661)	0.111*** (0.0166)	-0.040* (0.0232)	0.005 (0.0061)	0.015 (0.0368)	0.119*** (0.0201)	-0.030 (0.0206)	0.161*** (0.0184)	0.060*** (0.0173)	0.366*** (0.0332)	0.118*** (0.0260)
HH head has secondary ed.	0.049 (0.0859)	-0.003 (0.0710)	0.205*** (0.0196)	-0.024 (0.0288)	0.018*** (0.0061)	-0.057 (0.0438)	0.309*** (0.0369)	-0.099* (0.0527)	0.312*** (0.0237)	0.024 (0.0185)	0.481*** (0.0332)	0.050 (0.0382)
HH head has higher ed.	0.025 (0.0956)	-0.088 (0.0762)	0.086 (0.0895)	-0.039 (0.1019)	0.013* (0.0067)	-0.072 (0.0478)	0.424*** (0.0567)	0.033 (0.2337)	0.356*** (0.0359)	-0.053 (0.0351)	0.526*** (0.0326)	0.026 (0.0696)
Male HH members 0-6 years	-0.010 (0.0320)	0.022 (0.0271)	-0.000 (0.0087)	0.006 (0.0102)	-0.001 (0.0025)	-0.022 (0.0161)	-0.003 (0.0125)	0.021* (0.0124)	0.001 (0.0062)	0.009 (0.0065)	-0.035*** (0.0129)	0.001 (0.0105)
Female HH members 0-6 years	-0.017 (0.0277)	0.053* (0.0284)	-0.009 (0.0087)	0.011 (0.0104)	-0.006** (0.0025)	0.007 (0.0120)	-0.012 (0.0126)	0.022* (0.0117)	0.010 (0.0075)	0.009 (0.0058)	0.013 (0.0115)	-0.010 (0.0105)
Male HH members 7-14 years	0.003 (0.0234)	0.045* (0.0241)	0.034*** (0.0094)	0.002 (0.0103)	-0.002 (0.0031)	-0.006 (0.0127)	-0.045*** (0.0124)	0.005 (0.0121)	-0.007 (0.0064)	-0.003 (0.0074)	0.015 (0.0099)	-0.007 (0.0101)
Female HH members 7-14 years	0.006 (0.0220)	0.039** (0.0181)	0.026*** (0.0083)	0.006 (0.0104)	-0.002 (0.0023)	-0.002 (0.0131)	-0.022** (0.0105)	-0.001 (0.0115)	0.000 (0.0066)	-0.006 (0.0054)	-0.016 (0.0147)	-0.012 (0.0112)
Male HH members 15-59 years	-0.002 (0.0206)	0.017 (0.0173)	-0.012 (0.0088)	0.012 (0.0104)	-0.006** (0.0027)	0.015 (0.0164)	0.029** (0.0118)	-0.026** (0.0105)	0.001 (0.0071)	-0.008* (0.0051)	-0.013 (0.0094)	0.005 (0.0093)
Female HH members 15-59 years	-0.007 (0.0210)	0.046** (0.0200)	-0.010 (0.0090)	-0.014 (0.0115)	0.001 (0.0031)	0.002 (0.0158)	0.005 (0.0110)	-0.032*** (0.0104)	0.004 (0.0073)	-0.009* (0.0054)	0.028** (0.0125)	-0.002 (0.0123)
Male HH members 60+ years	-0.056 (0.0679)	0.011 (0.0481)	-0.012 (0.0356)	0.020 (0.0396)	-0.003 (0.0095)	-0.010 (0.0676)	0.026 (0.0509)	0.005 (0.0459)	0.004 (0.0325)	0.002 (0.0263)	-0.013 (0.0475)	-0.010 (0.0345)
Female HH members 60+ years	0.013 (0.0445)	0.014 (0.0380)	0.027 (0.0329)	0.043 (0.0434)	0.000 (0.0081)	0.041 (0.0525)	0.130** (0.0515)	-0.026 (0.0471)	-0.023 (0.0197)	0.045** (0.0179)	0.021 (0.0303)	0.002 (0.0313)
Urban	-0.064 (0.0689)	-0.373*** (0.0441)	-0.025 (0.0194)	-0.137*** (0.0265)	0.021** (0.0092)	-0.328*** (0.0329)	0.055 (0.0712)	-0.173*** (0.0361)	0.116*** (0.0237)	-0.132*** (0.0222)	-0.015 (0.0475)	-0.209*** (0.0512)
Second wealth quintile	0.107* (0.0614)	0.020 (0.0422)	0.065*** (0.0199)	-0.019 (0.0292)	0.008 (0.0061)	-0.103*** (0.0306)	-0.005 (0.0336)	0.015 (0.0310)	0.138*** (0.0216)	0.000 (0.0246)	0.371*** (0.0490)	-0.053 (0.0356)
Middle wealth quintile	0.117* (0.0696)	0.011 (0.0549)	0.106*** (0.0183)	-0.032 (0.0293)	0.011* (0.0059)	-0.132*** (0.0327)	0.041 (0.0326)	-0.017 (0.0276)	0.140*** (0.0230)	-0.023 (0.0377)	0.325*** (0.0576)	-0.150*** (0.0454)
Fourth wealth quintile	0.026 (0.0809)	-0.085 (0.0559)	0.141*** (0.0189)	-0.091*** (0.0294)	0.016** (0.0066)	-0.192*** (0.0305)	0.132*** (0.0315)	-0.021 (0.0260)	0.255*** (0.0225)	-0.076*** (0.0251)	0.418*** (0.0550)	-0.074 (0.0454)
Richest wealth quintile	0.048 (0.0849)	-0.135** (0.0615)	0.219*** (0.0202)	-0.218*** (0.0327)	0.027*** (0.0054)	-0.164*** (0.0354)	0.189*** (0.0321)	-0.053* (0.0295)	0.270*** (0.0263)	-0.169*** (0.0279)	0.528*** (0.0511)	-0.308*** (0.0628)
Observations	3359		6654		3953		4931		23522		6838	
Wald test	713.35		826.20		898.53		1310.52		2114.32		1699.92	

Marginal effects (dy/dx): * significant at 10%, ** significant at 5%, *** significant at 1%. Standard errors in parentheses.

	Colombia		Comoros		Congo, Dem. Rep.		Congo		Côte d'Ivoire		Dominican Republic	
	School p=0.942	Work p=0.036	School p=0.582	Work p=0.442	School p=0.671	Work p=0.473	School p=0.936	Work p=0.325	School p=0.629	Work p=0.461	School p=0.975	Work p=0.115
Age	0.070*** (0.0088)	0.015** (0.0065)	0.172*** (0.0329)	0.108*** (0.0360)	0.176*** (0.0822)	0.078 (0.0740)	0.113*** (0.0155)	0.072* (0.0390)	0.175*** (0.0211)	0.121*** (0.0249)	0.039*** (0.0118)	0.040 (0.0290)
Age squared	-0.004*** (0.0004)	0.000 (0.0003)	-0.007*** (0.0016)	-0.004** (0.0017)	-0.007** (0.0034)	-0.002 (0.0031)	-0.006*** (0.0007)	-0.002 (0.0019)	-0.009*** (0.0010)	-0.004*** (0.0012)	-0.002*** (0.0006)	-0.001 (0.0014)
Male	-0.020*** (0.0044)	0.027*** (0.0033)	0.028 (0.0174)	-0.022 (0.0191)	0.139*** (0.0156)	-0.007 (0.0145)	0.013* (0.0077)	-0.053*** (0.0167)	0.148*** (0.0118)	-0.067*** (0.0125)	-0.015* (0.0077)	0.069*** (0.0142)
Mother in household	0.039*** (0.0075)	-0.008* (0.0042)	0.073 (0.0475)	-0.017 (0.0430)	0.063*** (0.0208)	-0.021 (0.0203)	0.013 (0.0106)	-0.027 (0.0211)	0.070*** (0.0175)	-0.018 (0.0169)	0.018* (0.0098)	-0.002 (0.0206)
Father in household	0.008 (0.0054)	-0.007* (0.0038)	0.064** (0.0297)	-0.076** (0.0309)	0.071*** (0.0215)	0.022 (0.0211)	0.042*** (0.0117)	-0.016 (0.0245)	0.056*** (0.0187)	-0.056*** (0.0195)	0.000 (0.0092)	-0.006 (0.0212)
HH head's age	0.001** (0.0002)	-0.000 (0.0002)	-0.000 (0.0013)	0.001 (0.0013)	0.004*** (0.0009)	-0.001 (0.0010)	0.001 (0.0005)	-0.002* (0.0013)	-0.001 (0.0007)	-0.001 (0.0008)	0.001** (0.0004)	0.000 (0.0008)
HH head female	0.002 (0.0059)	-0.001 (0.0045)	-0.032 (0.0366)	-0.042 (0.0366)	0.051* (0.0283)	-0.034 (0.0315)	0.036*** (0.0111)	-0.070* (0.0366)	0.086*** (0.0201)	-0.062** (0.0286)	0.012* (0.0065)	0.029 (0.0253)
HH head has primary ed.	0.014** (0.0066)	-0.004 (0.0045)	0.066 (0.0408)	0.023 (0.0394)	0.096*** (0.0239)	0.028 (0.0254)	0.016 (0.0125)	-0.014 (0.0333)	0.167*** (0.0178)	-0.050** (0.0244)	0.015* (0.0077)	-0.040 (0.0260)
HH head has secondary ed.	0.036*** (0.0071)	-0.020*** (0.0050)	0.127*** (0.0355)	-0.017 (0.0405)	0.280*** (0.0246)	-0.021 (0.0318)	0.063*** (0.0180)	-0.083** (0.0422)	0.215*** (0.0179)	-0.098*** (0.0249)	0.026*** (0.0062)	-0.074*** (0.0223)
HH head has higher ed.	0.034*** (0.0079)	-0.022*** (0.0052)	0.155** (0.0612)	-0.098 (0.0688)	0.281*** (0.0199)	-0.106** (0.0531)	0.052*** (0.0114)	-0.116** (0.0457)	0.227*** (0.0249)	-0.146*** (0.0376)	0.018*** (0.0062)	-0.081*** (0.0264)
Male HH members 0-6 years	-0.004 (0.0033)	0.003 (0.0023)	-0.021 (0.0141)	0.018 (0.0151)	-0.006 (0.0078)	0.019** (0.0081)	-0.009* (0.0048)	0.041*** (0.0135)	-0.028*** (0.0068)	0.020** (0.0083)	-0.007 (0.0058)	0.005 (0.0106)
Female HH members 0-6 years	-0.006** (0.0032)	0.008*** (0.0023)	-0.022 (0.0155)	0.005 (0.0166)	0.005 (0.0080)	-0.011 (0.0086)	-0.014*** (0.0051)	0.034*** (0.0112)	-0.017** (0.0066)	0.013* (0.0078)	0.003 (0.0042)	0.009 (0.0107)
Male HH members 7-14 years	-0.000 (0.0036)	0.003 (0.0021)	-0.023** (0.0116)	-0.004 (0.0128)	-0.007 (0.0080)	-0.013 (0.0091)	0.003 (0.0041)	0.010 (0.0112)	0.024*** (0.0056)	0.004 (0.0066)	0.007 (0.0043)	0.016 (0.0111)
Female HH members 7-14 years	0.001 (0.0029)	0.004* (0.0022)	-0.004 (0.0159)	0.007 (0.0149)	0.014* (0.0081)	0.012 (0.0095)	0.013*** (0.0046)	-0.011 (0.0125)	0.019*** (0.0062)	0.003 (0.0077)	-0.001 (0.0048)	0.019* (0.0098)
Male HH members 15-59 years	-0.001 (0.0023)	0.000 (0.0016)	-0.008 (0.0108)	-0.024* (0.0130)	-0.001 (0.0062)	-0.007 (0.0072)	0.009** (0.0041)	-0.013 (0.0107)	-0.001 (0.0058)	-0.011* (0.0065)	0.007* (0.0036)	-0.006 (0.0086)
Female HH members 15-59 years	0.003 (0.0030)	-0.006*** (0.0018)	-0.014 (0.0117)	0.011 (0.0160)	-0.001 (0.0072)	0.003 (0.0071)	-0.002 (0.0042)	-0.007 (0.0100)	0.012** (0.0059)	-0.018*** (0.0061)	-0.007* (0.0037)	-0.013 (0.0110)
Male HH members 60+ years	0.002 (0.0077)	-0.010 (0.0062)	0.027 (0.0309)	0.042 (0.0382)	-0.000 (0.0329)	0.037 (0.0286)	0.002 (0.0132)	0.009 (0.0332)	0.042* (0.0218)	0.050* (0.0263)	-0.006 (0.0110)	0.019 (0.0244)
Female HH members 60+ years	0.014** (0.0070)	-0.008 (0.0050)	0.071** (0.0308)	0.007 (0.0409)	-0.018 (0.0259)	0.046* (0.0240)	0.008 (0.0151)	0.053* (0.0319)	0.035* (0.0211)	0.054*** (0.0209)	-0.011 (0.0121)	-0.075*** (0.0250)
Urban	0.003 (0.0064)	-0.014*** (0.0052)	-0.015 (0.0475)	0.077 (0.0699)	0.023 (0.0330)	-0.085** (0.0400)	-0.024** (0.0123)	-0.231*** (0.0440)	-0.013 (0.0242)	-0.273*** (0.0353)	-0.031*** (0.0084)	-0.028 (0.0187)
Second wealth quintile	0.021*** (0.0053)	-0.018*** (0.0037)	0.040 (0.0353)	-0.062 (0.0451)	-0.042 (0.0351)	0.000 (0.0383)	0.015 (0.0138)	0.074** (0.0372)	0.083*** (0.0201)	0.031 (0.0300)	0.000 (0.0075)	-0.015 (0.0200)
Middle wealth quintile	0.032*** (0.0061)	-0.025*** (0.0037)	0.172*** (0.0367)	-0.073 (0.0497)	0.026 (0.0311)	0.028 (0.0408)	0.040*** (0.0120)	-0.035 (0.0430)	0.114*** (0.0231)	-0.041 (0.0305)	0.038*** (0.0068)	-0.032* (0.0182)
Fourth wealth quintile	0.042*** (0.0060)	-0.036*** (0.0035)	0.188*** (0.0392)	-0.167*** (0.0489)	0.095*** (0.0332)	0.008 (0.0408)	0.062*** (0.0105)	-0.115** (0.0454)	0.171*** (0.0245)	-0.096** (0.0419)	0.026*** (0.0050)	-0.019 (0.0266)
Richest wealth quintile	0.046*** (0.0062)	-0.037*** (0.0034)	0.227*** (0.0373)	-0.168*** (0.0585)	0.180*** (0.0369)	-0.061 (0.0512)	0.072*** (0.0098)	-0.129*** (0.0476)	0.218*** (0.0294)	-0.252*** (0.0399)	0.036*** (0.0053)	-0.027 (0.0254)
Observations	26906		4095		7553		5932		11718		3230	
Wald test	1213.28		409.05		778.65		869.30		1428.31		395.39	

Marginal effects (dy/dx): * significant at 10%, ** significant at 5%, *** significant at 1%. Standard errors in parentheses.

	Gambia		Guinea		Guinea-Bissau		India		Kenya		Lao PDR	
	School p=0.665	Work p=0.256	School p=0.645	Work p=0.359	School p=0.434	Work p=0.731	School p=0.845	Work p=0.164	School p=0.924	Work p=0.408	School p=0.792	Work p=0.386
Age	0.290*** (0.0351)	-0.013 (0.0303)	0.255*** (0.0350)	0.135*** (0.0338)	0.278*** (0.0314)	0.089*** (0.0276)	0.083*** (0.0080)	0.035*** (0.0082)	0.083*** (0.0130)	0.119*** (0.0248)	0.347*** (0.0207)	0.130*** (0.0219)
Age squared	-0.013*** (0.0017)	0.001 (0.0015)	-0.012*** (0.0017)	-0.005*** (0.0016)	-0.012*** (0.0015)	-0.004*** (0.0013)	-0.005*** (0.0004)	0.000 (0.0004)	-0.004*** (0.0006)	-0.004*** (0.0012)	-0.016*** (0.0010)	-0.003*** (0.0010)
Male	0.089*** (0.0182)	-0.030** (0.0135)	0.096*** (0.0200)	0.034** (0.0162)	0.131*** (0.0169)	-0.018 (0.0122)	0.107*** (0.0065)	-0.038*** (0.0050)	0.009 (0.0071)	0.013 (0.0136)	0.091*** (0.0130)	-0.034*** (0.0119)
Mother in household	0.027 (0.0301)	-0.004 (0.0301)	0.090*** (0.0291)	-0.052* (0.0282)	-0.050** (0.0254)	-0.058*** (0.0212)	0.043*** (0.0099)	-0.035*** (0.0094)	0.082*** (0.0187)	-0.043 (0.0300)	0.036 (0.0370)	0.007 (0.0403)
Father in household	-0.009 (0.0260)	-0.007 (0.0264)	0.015 (0.0313)	0.030 (0.0314)	-0.056** (0.0271)	0.008 (0.0246)	0.047*** (0.0114)	-0.014 (0.0087)	0.025 (0.0202)	-0.014 (0.0334)	0.061** (0.0302)	-0.017 (0.0317)
HH head's age	0.000 (0.0013)	0.000 (0.0011)	0.000 (0.0011)	-0.000 (0.0010)	0.002** (0.0010)	-0.001 (0.0010)	0.001** (0.0003)	-0.001** (0.0003)	0.000 (0.0005)	0.004*** (0.0011)	0.001 (0.0007)	0.002** (0.0008)
HH head female	0.064** (0.0328)	0.027 (0.0314)	0.070** (0.0310)	0.046 (0.0375)	0.065* (0.0343)	-0.067** (0.0302)	0.066*** (0.0081)	-0.021** (0.0091)	0.013 (0.0169)	0.023 (0.0365)	0.018 (0.0279)	-0.013 (0.0392)
HH head has primary ed.	0.131** (0.0646)	-0.078 (0.0557)	0.085** (0.0352)	0.127*** (0.0460)	0.232*** (0.0266)	-0.046* (0.0274)	0.100*** (0.0049)	-0.039*** (0.0058)	0.082*** (0.0110)	-0.039 (0.0250)	0.110*** (0.0151)	-0.030 (0.0206)
HH head has secondary ed.	0.125*** (0.0463)	0.082** (0.0348)	0.171*** (0.0322)	0.064 (0.0404)	0.295*** (0.0319)	-0.092*** (0.0356)	0.180*** (0.0061)	-0.068*** (0.0062)	0.101*** (0.0085)	-0.016 (0.0293)	0.169*** (0.0145)	-0.031 (0.0275)
HH head has higher ed.	0.228*** (0.0462)	0.021 (0.0681)	0.285*** (0.0256)	0.027 (0.0462)			0.162*** (0.0045)	-0.106*** (0.0072)	0.070*** (0.0074)	0.003 (0.0702)	0.174*** (0.0155)	-0.061* (0.0369)
Male HH members 0-6 years	-0.003 (0.0120)	-0.000 (0.0059)	-0.007 (0.0105)	0.020* (0.0105)	0.001 (0.0101)	0.030*** (0.0103)	-0.030*** (0.0032)	0.003 (0.0033)	-0.008 (0.0054)	0.028** (0.0111)	-0.018*** (0.0069)	0.006 (0.0097)
Female HH members 0-6 years	-0.020* (0.0124)	-0.013 (0.0081)	-0.012 (0.0104)	0.039*** (0.0122)	-0.016 (0.0100)		-0.026*** (0.0089)	0.007** (0.0030)	-0.019*** (0.0046)	0.023** (0.0110)	-0.022*** (0.0073)	0.025*** (0.0088)
Male HH members 7-14 years	0.014* (0.0078)	0.011 (0.0078)	-0.010 (0.0111)	0.009 (0.0117)	0.007 (0.0100)	0.007 (0.0089)	-0.009** (0.0037)	-0.007** (0.0030)	-0.002 (0.0047)	0.019* (0.0105)	-0.010 (0.0075)	0.005 (0.0097)
Female HH members 7-14 years	-0.017 (0.0117)	-0.000 (0.0063)	-0.030*** (0.0113)	0.004 (0.0107)	0.016 (0.0102)	0.011 (0.0091)	-0.002 (0.0038)	-0.009*** (0.0028)	0.008* (0.0047)	0.001 (0.0102)	0.000 (0.0060)	0.009 (0.0108)
Male HH members 15-59 years	-0.015*** (0.0056)	-0.008 (0.0064)	-0.014** (0.0062)	-0.004 (0.0083)	-0.001 (0.0077)	0.004 (0.0070)	-0.003 (0.0027)	-0.004* (0.0025)	-0.008** (0.0042)	0.008 (0.0097)	-0.005 (0.0076)	0.013 (0.0095)
Female HH members 15-59 years	0.029*** (0.0090)	0.020*** (0.0072)	0.020** (0.0094)	-0.023** (0.0097)	0.003 (0.0085)	-0.003 (0.0077)	0.025*** (0.0033)	-0.017*** (0.0029)	0.007 (0.0054)	0.006 (0.0116)	0.004 (0.0067)	-0.029*** (0.0075)
Male HH members 60+ years	-0.018 (0.0327)	0.004 (0.0260)	-0.005 (0.0274)	0.031 (0.0353)	-0.043 (0.0294)	0.006 (0.0276)	0.023*** (0.0077)	-0.008 (0.0075)	-0.017 (0.0175)	-0.034 (0.0397)	0.012 (0.0206)	0.002 (0.0233)
Female HH members 60+ years	0.020 (0.0375)	0.012 (0.0187)	-0.003 (0.0274)	0.022 (0.0270)	0.021 (0.0245)	0.005 (0.0252)	0.049*** (0.0069)	-0.023*** (0.0067)	0.062*** (0.0202)	-0.102** (0.0398)	0.010 (0.0149)	0.001 (0.0198)
Urban	0.015 (0.0293)	-0.178*** (0.0391)	0.183*** (0.0334)	-0.170*** (0.0295)	0.292*** (0.0361)	-0.244*** (0.0358)	-0.004 (0.0088)	-0.026*** (0.0087)	-0.092*** (0.0246)	-0.230*** (0.0321)	0.111*** (0.0212)	-0.037 (0.0277)
Second wealth quintile	0.089*** (0.0341)	-0.035 (0.0253)	-0.013 (0.0351)	-0.095*** (0.0343)	0.018 (0.0316)	-0.109*** (0.0384)	0.027*** (0.0073)	-0.032*** (0.0075)	0.037*** (0.0086)	0.001 (0.0252)	0.073*** (0.0211)	0.043** (0.0263)
Middle wealth quintile	0.177*** (0.0363)	-0.052 (0.0358)	0.057* (0.0328)	-0.086*** (0.0311)	0.063* (0.0375)	-0.039 (0.0396)	0.079*** (0.0069)	-0.028*** (0.0084)	0.033*** (0.0089)	-0.040 (0.0265)	0.130*** (0.0174)	0.046 (0.0292)
Fourth wealth quintile	0.178*** (0.0426)	-0.093*** (0.0354)	0.163*** (0.0337)	-0.147*** (0.0308)	0.173*** (0.0394)	-0.159*** (0.0433)	0.094*** (0.0074)	-0.045*** (0.0084)	0.061*** (0.0082)	-0.115*** (0.0286)	0.174*** (0.0183)	0.006 (0.0321)
Richest wealth quintile	0.273*** (0.0314)	-0.132*** (0.0354)	0.185*** (0.0381)	-0.239*** (0.0350)	0.259*** (0.0435)	-0.345*** (0.0510)	0.142*** (0.0069)	-0.091*** (0.0078)	0.057*** (0.0115)	-0.310*** (0.0290)	0.219*** (0.0170)	-0.074* (0.0380)
Observations	6121		4631		7072		104534		9770		8773	
Wald test	609.56		805.28		1434.37		6116.47		1164.98		1970.48	

Marginal effects (dy/dx): * significant at 10%, ** significant at 5%, *** significant at 1%. Standard errors in parentheses.

	Lesotho		Malawi		Mali		Mongolia		Nicaragua		Niger	
	School p=0.892	Work p=0.343	School p=0.871	Work p=0.413	School p=0.379	Work p=0.436	School p=0.740	Work p=0.387	School p=0.844	Work p=0.116	School p=0.372	Work p=0.796
Age	0.143*** (0.0178)	0.037 (0.0264)	0.181*** (0.0145)	0.217*** (0.0214)	0.230*** (0.0287)	0.134*** (0.0231)	0.638*** (0.0330)	0.068** (0.0298)	0.202*** (0.0162)	0.039*** (0.0146)	0.210*** (0.0377)	0.140*** (0.0266)
Age squared	-0.007*** (0.0008)	-0.000 (0.0012)	-0.008*** (0.0007)	-0.006*** (0.0010)	-0.011*** (0.0014)	-0.003*** (0.0011)	-0.028*** (0.0015)	-0.001 (0.0014)	-0.010*** (0.0008)	0.000 (0.0007)	-0.010*** (0.0018)	-0.005*** (0.0013)
Male	-0.084*** (0.0109)	0.041*** (0.0129)	-0.010 (0.0076)	0.055*** (0.0124)	0.162*** (0.0126)	0.021 (0.0131)	-0.041*** (0.0149)	-0.023 (0.0162)	-0.041*** (0.0077)	0.061*** (0.0081)	0.142*** (0.0197)	0.052*** (0.0173)
Mother in household	0.048*** (0.0137)	0.006 (0.0225)	0.007 (0.0123)	0.018 (0.0181)	0.044** (0.0205)	0.004 (0.0196)	0.018 (0.0419)	0.034 (0.0474)	0.061*** (0.0156)	-0.007 (0.0109)	0.005 (0.0329)	-0.017 (0.0237)
Father in household	0.019 (0.0129)	-0.069*** (0.0221)	0.035*** (0.0125)	0.033* (0.0183)	0.064*** (0.0245)	-0.024 (0.0245)	0.028 (0.0358)	0.050 (0.0374)	0.017 (0.0139)	0.018* (0.0096)	0.044 (0.0395)	0.016 (0.0284)
HH head's age	0.001 (0.0005)	-0.001 (0.0009)	0.001* (0.0004)	0.002*** (0.0007)	-0.000 (0.0009)	-0.000 (0.0009)	-0.001 (0.0011)	-0.002 (0.0014)	0.001 (0.0005)	-0.000 (0.0004)	0.001 (0.0015)	0.003*** (0.0010)
HH head female	0.002 (0.0142)	-0.052** (0.0250)	0.041*** (0.0111)	0.011 (0.0225)	0.062* (0.0324)	-0.065** (0.0288)	-0.030 (0.0372)	-0.020 (0.0441)	-0.001 (0.0169)	0.008 (0.0114)	-0.024 (0.0517)	-0.030 (0.0337)
HH head has primary ed.	0.054*** (0.0116)	-0.023 (0.0213)	0.076*** (0.0103)	0.065*** (0.0164)	0.195*** (0.0223)	-0.112*** (0.0211)	0.058 (0.0355)	0.092* (0.0529)	0.081*** (0.0102)	-0.031*** (0.0086)	0.186*** (0.0485)	0.033 (0.0322)
HH head has secondary ed.	0.074*** (0.0113)	-0.055* (0.0305)	0.091*** (0.0106)	0.014 (0.0282)	0.345*** (0.0273)	-0.109*** (0.0281)	0.150*** (0.0388)	-0.003 (0.0480)	0.114*** (0.0124)	-0.059*** (0.0123)	0.318*** (0.0595)	-0.076 (0.0475)
HH head has higher ed.	0.092*** (0.0128)	-0.008 (0.0631)	0.016 (0.0357)	-0.121** (0.0590)	0.372*** (0.0329)	-0.197*** (0.0391)	0.182*** (0.0312)	0.023 (0.0522)	0.115*** (0.0181)	-0.069*** (0.0156)	0.412*** (0.0590)	-0.078 (0.0585)
Male HH members 0-6 years	-0.023*** (0.0065)	-0.013 (0.0125)	-0.003 (0.0054)	-0.003 (0.0086)	-0.009 (0.0075)	0.014 (0.0094)	0.003 (0.0130)	0.005 (0.0152)	-0.027*** (0.0059)	0.015*** (0.0044)	-0.000 (0.0105)	-0.004 (0.0086)
Female HH members 0-6 years	-0.005 (0.0067)	-0.010 (0.0117)	-0.004 (0.0050)	0.014 (0.0091)	-0.007 (0.0079)	0.014* (0.0078)	-0.008 (0.0136)	0.009 (0.0153)	-0.018*** (0.0060)	0.016*** (0.0045)	0.004 (0.0119)	0.015 (0.0094)
Male HH members 7-14 years	0.006 (0.0065)	0.005 (0.0119)	-0.006 (0.0053)	0.008 (0.0089)	-0.010 (0.0080)	0.006 (0.0071)	-0.006 (0.0108)	-0.012 (0.0138)	-0.012** (0.0053)	0.004 (0.0042)	0.024** (0.0103)	0.001 (0.0099)
Female HH members 7-14 years	-0.021*** (0.0063)	-0.009 (0.0126)	-0.006 (0.0057)	0.006 (0.0084)	-0.001 (0.0081)	0.000 (0.0089)	-0.008 (0.0107)	-0.033** (0.0142)	-0.001 (0.0051)	-0.006 (0.0044)	0.001 (0.0139)	-0.017* (0.0098)
Male HH members 15-59 years	-0.000 (0.0047)	0.005 (0.0087)	-0.010* (0.0053)	-0.022*** (0.0083)	0.011 (0.0082)	-0.020*** (0.0077)	-0.005 (0.0107)	0.006 (0.0130)	-0.002 (0.0045)	-0.009*** (0.0035)	-0.002 (0.0117)	-0.024*** (0.0086)
Female HH members 15-59 years	-0.004 (0.0056)	0.015 (0.0099)	0.017*** (0.0063)	-0.014 (0.0099)	0.031*** (0.0085)	-0.008 (0.0093)	0.015 (0.0103)	-0.023* (0.0124)	0.005 (0.0065)	-0.016*** (0.0044)	0.011 (0.0117)	-0.016 (0.0099)
Male HH members 60+ years	-0.010 (0.0174)	-0.009 (0.0308)	-0.040** (0.0165)	-0.056** (0.0255)	-0.005 (0.0253)	-0.009 (0.0242)	0.078* (0.0409)	-0.049 (0.0532)	-0.012 (0.0178)	0.025** (0.0117)	0.013 (0.0382)	-0.034 (0.0303)
Female HH members 60+ years	-0.011 (0.0166)	0.007 (0.0267)	0.011 (0.0144)	-0.028 (0.0233)	0.069*** (0.0197)	0.013 (0.0226)	-0.004 (0.0362)	0.026 (0.0428)	0.034** (0.0170)	-0.024* (0.0131)	0.037 (0.0396)	-0.009 (0.0312)
Urban	-0.028* (0.0159)	-0.087*** (0.0269)	0.013 (0.0167)	-0.215*** (0.0294)	0.149*** (0.0328)	-0.173*** (0.0317)	-0.086** (0.0432)	-0.149*** (0.0333)	0.012 (0.0140)	-0.010 (0.0128)	0.184*** (0.0502)	-0.157*** (0.0459)
Second wealth quintile	0.051*** (0.0099)	0.027 (0.0274)	0.025** (0.0117)	0.036* (0.0208)	0.011 (0.0247)	0.032 (0.0212)	0.064*** (0.0233)	-0.162*** (0.0343)	0.099*** (0.0125)	-0.054*** (0.0087)	0.029 (0.0445)	-0.021 (0.0241)
Middle wealth quintile	0.064*** (0.0106)	-0.009 (0.0281)	0.055*** (0.0116)	0.032 (0.0204)	0.046** (0.0228)	0.028 (0.0308)	0.123*** (0.0256)	-0.236*** (0.0341)	0.138*** (0.0127)	-0.076*** (0.0102)	0.070* (0.0369)	-0.018 (0.0278)
Fourth wealth quintile	0.100*** (0.0093)	-0.010 (0.0289)	0.080*** (0.0108)	-0.040* (0.0216)	0.126*** (0.0272)	-0.050* (0.0287)	0.081** (0.0353)	-0.222*** (0.0353)	0.172*** (0.0130)	-0.098*** (0.0102)	0.050 (0.0430)	0.022 (0.0259)
Richest wealth quintile	0.107*** (0.0099)	-0.011 (0.0344)	0.121*** (0.0111)	-0.160*** (0.0271)	0.262*** (0.0371)	-0.051 (0.0398)	0.110*** (0.0402)	-0.270*** (0.0373)	0.170*** (0.0119)	-0.120*** (0.0091)	0.271*** (0.0502)	-0.079* (0.0454)
Observations	6316		14302		15233		5264		13963		5311	
Wald test	660.08		2381.77		1954.92		889.58		2092.61		851.31	

Marginal effects (dy/dx): * significant at 10%, ** significant at 5%, *** significant at 1%. Standard errors in parentheses.

	Senegal		Sierra Leone		Somalia		Swaziland		Tanzania		Uganda	
	School p=0.587	Work p=0.349	School p=0.483	Work p=0.791	School p=0.147	Work p=0.447	School p=0.908	Work p=0.116	School p=0.566	Work p=0.478	School p=0.900	Work p=0.539
Age	0.263*** (0.0226)	0.042** (0.0196)	0.046 (0.0379)	0.051* (0.0266)	0.101*** (0.0269)	0.157*** (0.0405)	0.122*** (0.0198)	0.028 (0.0231)	0.496*** (0.0509)	0.259*** (0.0416)	0.185*** (0.0152)	0.253*** (0.0278)
Age squared	-0.013*** (0.0011)	-0.001 (0.0009)	-0.002 (0.0018)	-0.001 (0.0013)	-0.004*** (0.0012)	-0.005*** (0.0019)	-0.006*** (0.0009)	-0.001 (0.0011)	-0.019*** (0.0024)	-0.009*** (0.0020)	-0.008*** (0.0007)	-0.009*** (0.0013)
Male	0.033*** (0.0127)	0.033** (0.0130)	0.097*** (0.0179)	-0.006 (0.0133)	0.041*** (0.0115)	-0.131*** (0.0241)	-0.017* (0.0087)	-0.004 (0.0100)	-0.011 (0.0289)	0.038 (0.0243)	0.007 (0.0069)	-0.012 (0.0132)
Mother in household	0.041*** (0.0158)	-0.017 (0.0154)	-0.003 (0.0267)	-0.046*** (0.0172)	0.076*** (0.0241)	-0.034 (0.0447)	0.031** (0.0142)	-0.027* (0.0149)	0.003 (0.0351)	-0.068** (0.0336)	0.006 (0.0128)	-0.046*** (0.0175)
Father in household	0.036** (0.0155)	-0.003 (0.0165)	0.055* (0.0293)	0.025 (0.0206)	0.008 (0.0300)	-0.003 (0.0382)	-0.026** (0.0122)	0.029* (0.0171)	0.082** (0.0377)	0.058* (0.0331)	0.056*** (0.0137)	-0.015 (0.0233)
HH head's age	0.003*** (0.0007)	-0.001 (0.0007)	0.001 (0.0012)	0.000 (0.0008)	-0.001 (0.0010)	-0.001 (0.0015)	0.000 (0.0006)	0.000 (0.0007)	0.003** (0.0014)	-0.002 (0.0014)	-0.001 (0.0005)	0.004*** (0.0010)
HH head female	0.118*** (0.0211)	-0.018 (0.0223)	0.110** (0.0446)	-0.044 (0.0307)	0.036 (0.0377)	-0.017 (0.0416)	-0.011 (0.0143)	0.003 (0.0191)	0.013 (0.0383)	0.025 (0.0422)	0.040*** (0.0111)	-0.008 (0.0281)
HH head has primary ed.	0.261*** (0.0192)	-0.032 (0.0258)	0.176*** (0.0471)	0.032 (0.0356)	0.120** (0.0549)	-0.047 (0.0389)	0.053*** (0.0127)	0.016 (0.0180)	0.159*** (0.0346)	0.024 (0.0366)	0.036*** (0.0150)	-0.005 (0.0271)
HH head has secondary ed.	0.283*** (0.0218)	-0.051 (0.0397)	0.206*** (0.0342)	-0.040 (0.0302)	0.182*** (0.0444)	-0.097** (0.0448)	0.076*** (0.0128)	-0.005 (0.0205)	0.196*** (0.0576)	-0.184*** (0.0618)	0.067*** (0.0137)	-0.034 (0.0336)
HH head has higher ed.	0.390*** (0.0184)	-0.031 (0.0775)	0.311*** (0.0421)	-0.119** (0.0472)	0.266*** (0.0726)	-0.045 (0.0685)	0.061*** (0.0175)	-0.036 (0.0337)	0.030 (0.1121)	-0.481*** (0.0170)	0.065*** (0.0132)	-0.151*** (0.0447)
Male HH members 0-6 years	-0.009 (0.0059)	0.009 (0.0075)	0.006 (0.0141)	-0.001 (0.0104)	-0.005 (0.0122)	0.004 (0.0169)	-0.007 (0.0045)	0.012* (0.0068)	0.015 (0.0204)	0.021 (0.0134)	-0.005 (0.0053)	0.023** (0.0096)
Female HH members 0-6 years	-0.019*** (0.0063)	0.001 (0.0058)	-0.003 (0.0128)	-0.004 (0.0099)	-0.009 (0.0126)	0.010 (0.0145)	-0.006 (0.0058)	0.013* (0.0075)	-0.007 (0.0174)	-0.004 (0.0186)	-0.004 (0.0056)	0.001 (0.0113)
Male HH members 7-14 years	-0.007* (0.0036)	0.010*** (0.0032)	0.004 (0.0111)	0.007 (0.0087)	0.025*** (0.0085)	-0.034** (0.0139)	0.022*** (0.0045)	-0.006 (0.0069)	-0.027** (0.0112)	-0.016 (0.0175)	-0.002 (0.0054)	0.032*** (0.0102)
Female HH members 7-14 years	0.003 (0.0065)	-0.014* (0.0073)	0.023** (0.0097)	-0.009 (0.0084)	0.044*** (0.0100)	-0.038** (0.0150)	0.013** (0.0053)	-0.025*** (0.0063)	0.002 (0.0144)	-0.014 (0.0196)	0.002 (0.0054)	0.017 (0.0111)
Male HH members 15-59 years	0.002 (0.0052)	0.013** (0.0051)	0.000 (0.0115)	-0.001 (0.0077)	0.021* (0.0107)	0.002 (0.0161)	0.006 (0.0042)	-0.004 (0.0063)	-0.010 (0.0114)	0.028** (0.0119)	-0.000 (0.0057)	-0.027*** (0.0094)
Female HH members 15-59 years	0.003 (0.0054)	-0.013*** (0.0051)	0.008 (0.0101)	-0.002 (0.0073)	0.025** (0.0117)	-0.014 (0.0158)	-0.003 (0.0049)	-0.011* (0.0063)	-0.011 (0.0162)	0.023 (0.0193)	0.017*** (0.0059)	-0.023** (0.0109)
Male HH members 60+ years	-0.005 (0.0203)	-0.015 (0.0219)	-0.070** (0.0355)	0.006 (0.0242)	0.022 (0.0349)	-0.019 (0.0465)	-0.008 (0.0155)	-0.017 (0.0216)	-0.100*** (0.0381)	0.089* (0.0498)	0.038* (0.0192)	-0.068 (0.0442)
Female HH members 60+ years	0.033** (0.0144)	0.008 (0.0155)	0.011 (0.0256)	-0.012 (0.0200)	0.073** (0.0340)	0.025 (0.0530)	0.013 (0.0145)	-0.002 (0.0211)	-0.003 (0.0447)	0.038 (0.0411)	0.050*** (0.0181)	-0.050 (0.0342)
Urban	0.129*** (0.0398)	0.002 (0.0375)	0.143*** (0.0431)	-0.021 (0.0315)	-0.040 (0.0378)	-0.030 (0.0473)	-0.002 (0.0299)	0.079** (0.0397)	-0.013 (0.0496)	-0.110** (0.0536)	-0.063*** (0.0224)	-0.217*** (0.0355)
Second wealth quintile	0.055** (0.0259)	-0.055** (0.0258)	0.075** (0.0382)	0.000 (0.0305)	-0.003 (0.0407)	0.086* (0.0522)	0.044*** (0.0120)	-0.027 (0.0203)	0.078** (0.0396)	-0.026 (0.0369)	0.012 (0.0162)	-0.010 (0.0266)
Middle wealth quintile	0.062 (0.0393)	-0.072** (0.0334)	0.083** (0.0405)	-0.046 (0.0307)	0.145** (0.0716)	-0.053 (0.0574)	0.067*** (0.0114)	-0.002 (0.0206)	0.138*** (0.0391)	-0.188*** (0.0427)	0.045*** (0.0127)	0.034 (0.0288)
Fourth wealth quintile	0.050 (0.0485)	-0.165*** (0.0349)	0.192*** (0.0406)	-0.077* (0.0403)	0.242*** (0.0850)	-0.116* (0.0622)	0.067*** (0.0130)	0.045 (0.0310)	0.235*** (0.0449)	-0.114** (0.0464)	0.067*** (0.0121)	0.076** (0.0334)
Richest wealth quintile	0.093* (0.0513)	-0.206*** (0.0398)	0.299*** (0.0484)	-0.139*** (0.0513)	0.409*** (0.0841)	-0.201*** (0.0579)	0.093*** (0.0117)	-0.008 (0.0333)	0.412*** (0.0358)	-0.249*** (0.0556)	0.074*** (0.0165)	0.028 (0.0382)
Observations	14441		4528		3591		4334		4145		8773	
Wald test	851.87		469.92		812.24		332.71		5776.94		1210.79	

Marginal effects (dy/dx): * significant at 10%, ** significant at 5%, *** significant at 1%. Standard errors in parentheses.