

# **How Changes in Schooling Affect Child Labor: The case of 3 FTI countries**

by

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## **Abstract**

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The Education For All - Fast Track Initiative (EFA-FTI) is a global partnership between donors and developing countries to accelerate progress toward universal primary education by 2015. One obstacle to achieving this goal is children's participation in labour markets because schooling and work compete for children's time. Using data from the Multiple Indicator Cluster Surveys, this paper compares the impact of changes in schooling on the prevalence of child labour in Gambia, Niger, and Vietnam.

The results show that as school attendance and primary school completion improved in all 3 countries, child labour declined in Niger and Vietnam while remaining stable in Gambia. However, the average number of hours spent in labour activities was reduced in all 3 countries and particularly in Gambia where it was halved. The extent to which child labour declined when school attendance and primary school completion rates increased varies across countries according to gender, urbanization and household wealth.

The findings, interpretations and conclusions expressed in this paper do not necessarily reflect the views of FTI Partners, organizations or governments they represent.

## **Introduction**

Child labour is widespread and concerns a large number of school age children. In 2004, 166 million children 5-14 were child labourers which, represents a reduction of 11% since year 2000 (ILO, 2006). Given the large consensus that education is one of the effective ways to fight child labour, the success of the international community in eliminating child labour is therefore linked to the progress made in achieving the Education For All goal of universal primary education.

The Education For All - Fast Track Initiative (EFA-FTI), a global partnership between donors and developing countries was launched in 2002 to accelerate progress toward universal primary education by 2015. A sound and credible national education sector plan constitutes the basis for low income countries' participation in the EFA-FTI partnership. Since the 2000 Dakar forum on education, many low-income countries have made progress in primary education and the EFA-FTI partnership appears to have accelerated progress for countries with FTI-endorsed education sector plans. Within EFA-FTI, progress is considered in terms of the primary completion rate, i.e., the proportion of school age children in a given country that complete full primary education.

Using data from the Multiple Indicator Cluster Surveys (MICS), this paper examines the impact of the progress in school attendance and primary school completion on the prevalence of child labour in Gambia, Niger, and Vietnam. These countries were among the first ones that have their national education sector plans endorsed by the partnership with the first two countries having received a financial support in the amount of US\$ 41.4 million and US\$ 21 million, respectively. Moreover, these 3 countries are currently the only FTI endorsed countries for which child labour survey data are available for both the periods before and after FTI endorsement.

Despite the overall progress in primary education, access to education remains constrained for girls, poor and rural children in many developing countries. Research has shown that child labour also has a gender dimension, with boys and girls often doing different jobs. While boys tend to be engaged more in economic activities, girls are more likely to carry out household chores. Gender inequalities are often exacerbated by the urban-rural divide and poverty. School participation is often lower in rural areas where child labour is also expected to be more predominant due to higher poverty and limited availability of school.

Following this introduction, the paper provides some background information on the 3 countries and a description of the data sources used in analysis. In the subsequent sections, it presents the changes in school attendance and primary school completion rates and how these changes influenced the prevalence of child labour at the national level, by gender, residence and household wealth. Finally, it concludes with a broad overview of trends across the 3 countries and some recommendations on the data side for the monitoring of child labour in FTI countries.

## **Background information on the countries**

The Gambia is a small, low-income country with a population of 1.7 million people, of which 61% live below the national poverty line. Primary education caters to children aged 7-12. Between 1999 and 2006, primary school participation rates remained low as evidenced by the gross enrolment ratio (GER) which was below 80% and by the slow increase in the number of new entrants to grade 1 of primary school (8%). The primary school completion rate (PCR) dropped from 86% in 2001 to 63% in 2006. Given the trend in PCR, Gambia is considered to be seriously off-track in terms of achieving the goal of universal primary education. Committed to achieving the goal of universal primary education by 2015, the government of Gambia has developed an Education Sector Strategic Plan for the period 2006-2015 (ESSP) which covers several key areas including access; quality education; teacher education, deployment and utilization; technical and vocational education; and higher education. This education sector plan was endorsed by the FTI partnership in 2003. To date, FTI has provided the country with a financial support in the amount of US \$41.4 million to help with the implementation of its education plans.

With a population of about 14 million people and a gross national income per capita of US \$280 in 2007, Niger is one of the poorest countries in the world. The majority of its population live in rural areas, and about half of the population is under 15 years of age. Primary school ages in Niger range from 7-12. Between 1999 and 2006, Niger has made significant progress in access to primary education as evidenced by the increase in the primary grade one intake ratio from 43% to 68%, and in the primary gross enrolment ratio from 31% to 51% during that time period. The grade one intake ratio reached its highest annual increase of 24% during the country's endorsement year (2002). Two years after the country's endorsement the primary completion rate (PCR), which was stagnant at about 20%, also started to increase slowly and reached 33% in 2006. Given the low level of primary enrolment ratios and the slow trend in PCR, Niger is considered to be off-track in terms of achieving universal primary education by 2015. However, the government of Niger is committed to achieving universal primary education, and has developed an education sector plan for the period 2002-2012 which gives priority to basic education. This plan was endorsed by the FTI partnership in 2002 and Niger received a financial support in the amount of US \$21 to help with the implementation of the plan.

Vietnam's population is estimated to be about 85 million in 2007, of which 29% live below the national poverty line. Primary school ages range from 6 to 10. The country's education development strategic plan for the period 2001-2010 was endorsed by the FTI partnership in 2003. The plan's main focus includes curriculum reform at all levels of the education sector, teacher training and development at all levels to ensure quality, education management to enhance state effectiveness, and the strengthening of financial resources. Vietnam is considered to be on-track for achieving universal primary education by 2015.

## Data sources

As stated earlier, this paper uses data from the Multiple Indicator Cluster Surveys (MICS). The MICS programme was originally designed by UNICEF to obtain data on key indicators for assessing progress towards the goals of the World Summit for Children that took place in 1990. The programme has become an important data source for monitoring the Millennium Development Goals. Since the first round of MICS conducted around 1995, the survey has been repeated about every 5 years, with the last round being carried out in 2005-06. Each round of MICS includes 3 separate questionnaires for households, individual women aged 15-49, and for children under 5 years of age. All the 3 survey questionnaires are standardized across countries. For each of the 3 countries studied, this paper analyzed household-level data from the last 2 rounds of MICS (2000, and 2005-06) with the first survey being conducted prior to each country's endorsement by EFA-FTI, and the second one after endorsement. The household questionnaire includes one module on education which gathered for each household member age 5 and over, information on school attendance, level and grade attended for both the current and previous school years. It also includes one module on child labour which collected information on economic activity and household chores for each child aged 5-14. In this paper<sup>1</sup>, a child is considered to be involved in child labour activities according to the number of hours worked and the type of activity the child is engaged in, and the age of the child as follows:

- Ages 5-11: at least one hour of economic work or 28 hours of domestic work per week.
- Ages 12-14: at least 14 hours of economic work or 28 hours of domestic work per week.

Therefore, the age range used to examine child labour covers the primary school age range in all 3 countries. The child labour indicator corresponds to the proportion of children aged 5-14 years that are involved in child labour.

School attendance is measured as the proportion of primary school age children attending primary or secondary school, that is the complement of what is known as the rate of out-of school. The primary school completion rate is measured as the ratio of the number of children attending the last grade of primary school (excluding repeaters) to the number of children of primary school completion age surveyed.

MICS surveys also collect information on housing characteristics (e.g. main material of the floor or main cooking fuel), and assets owned by households (e.g. radio) and by household members (e.g. bicycle). This information was used to derive a wealth index for households based on the method of principal components as described in Filmer and Pritchett (1998). This wealth index serves as a proxy for the socioeconomic status of the household in this paper.

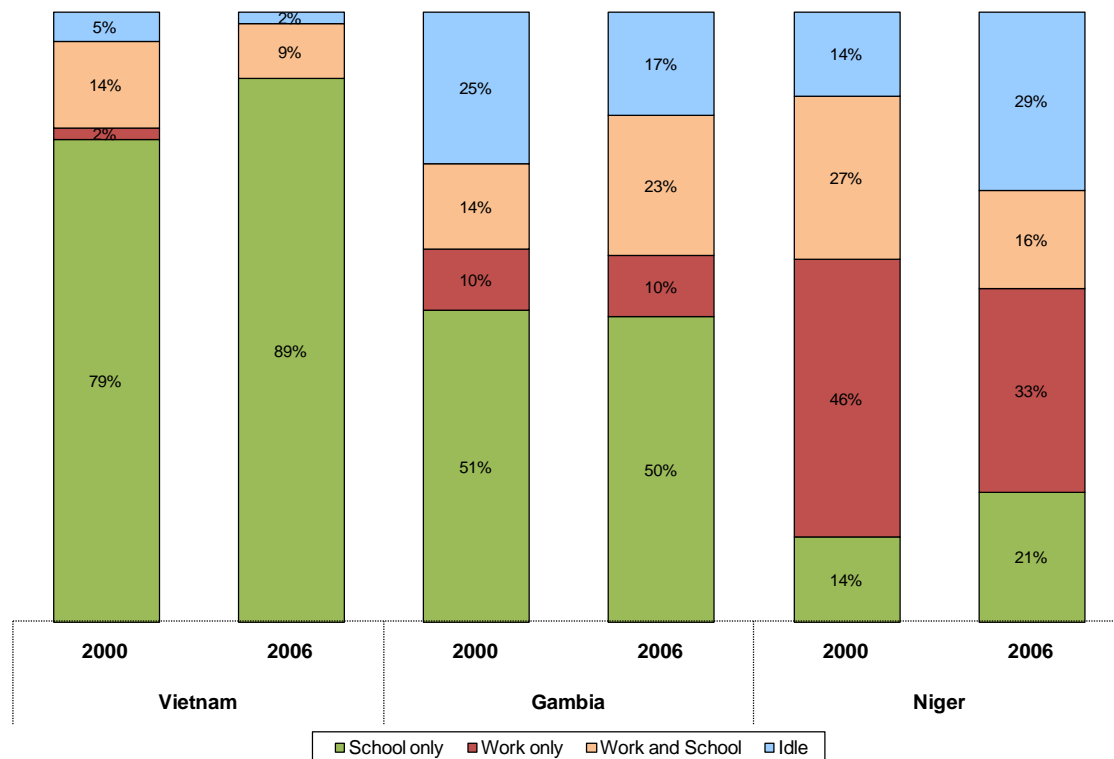
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<sup>1</sup> This definition of child labour corresponds to that used by the project on Understanding Children's Work (UCW).

## Results

In many developing countries, child labour is often performed at the expense of education, and thus represents a severe obstacle to achieving universal primary education. As is shown in figure 1, between 2000 and 2006 in Gambia while only half of the primary school age population attended school only, more and more primary school age children engaged in child labour while still attending school. In Niger, child labour remains more predominant than schooling among primary school age children: 73% versus 41% in 2000 compared to 49% versus 37% in 2006. In contrast, the majority of primary school age children in Vietnam attended school only and the proportion increased from 79% to 89% during the same period.

**Figure 1:** Distribution of primary school age children by work and schooling status.



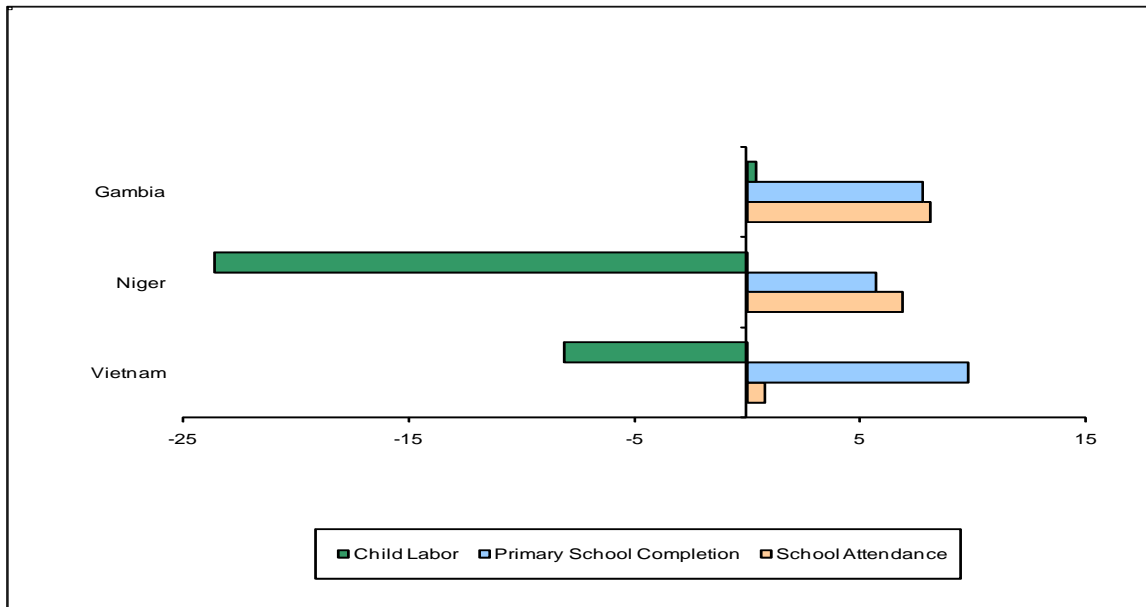
Several studies on child labour and education show the negative impact of work on children's school attendance as well as the educational performance of those who combine school and work (see e.g., Allias and Hagemann 2008, Grootaert 1999, Thiam 2005). While reducing child labour is critical to improving children's educational participation, at the same time keeping children in school also appears to be an important element in the prevention of child labour as evidenced by the survey data for the 3 FTI endorsed countries. Following the country's endorsement, school attendance in Vietnam remained high at the same level of 94% and primary school completion rate increased

from 71% to 81%. During this period, child labour declined from 24% to 16% and the average number of hours children spent in labour activities decreased by 3 hours per week (from 26 to 23). Moreover, the proportion of child labourers was reduced among school children (from 22 to 15%) while remaining stable at about 38% for children not in school; suggesting that schooling had the effect of reducing children’s participation in labour activities.

In Gambia, school attendance and primary school completion also improved after FTI endorsement from 53% to 61%, and from 66% to 74%, respectively. Although 1 in 4 children remained engaged in child labour, the average number of hours worked by primary school age children dropped significantly from 37 to 14 hours per week.

In Niger, progress in schooling appears to be slow as evidenced by the slight increase in school attendance from 31% to 38% and in the primary completion rate from 15% to 21%. However, this slight improvement in schooling was accompanied with a significant reduction in child labour from 66% to 43% (that is by one third), and in the average number of hours of work per week from 48 to 25. As a result, the proportion of primary school age children combining work and school dropped from 27% to 16%.

**Figure 2:** Change in percentage points in school attendance, primary school completion rate and child labour, by country.



### The gender inequality

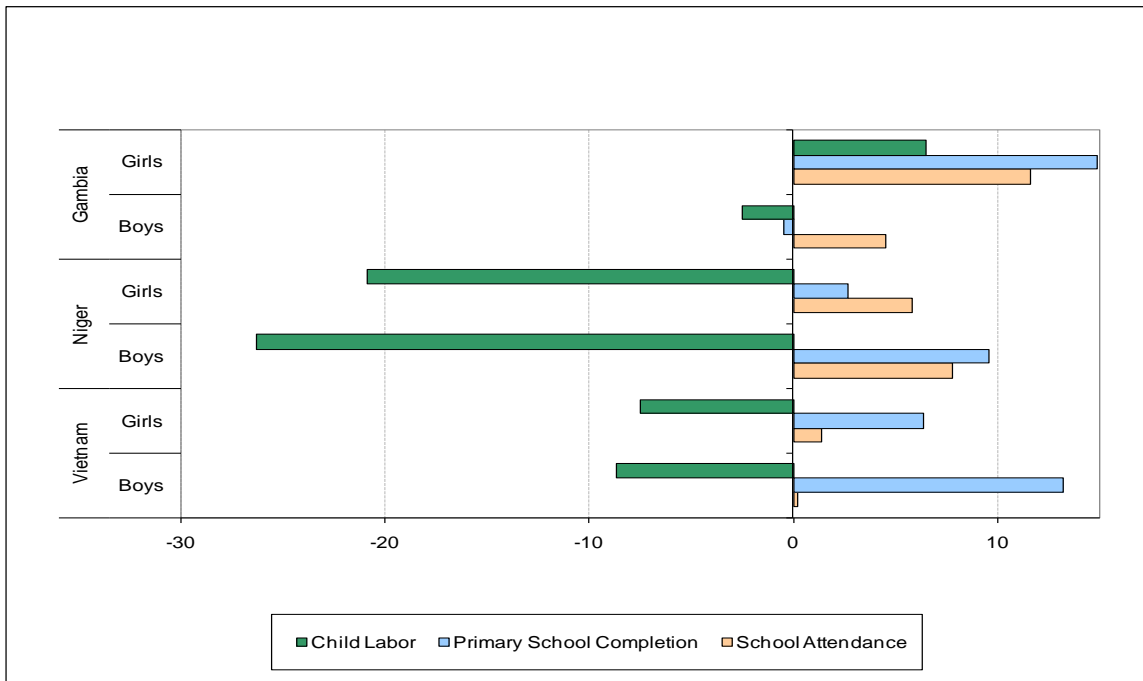
In 2006, 75 million children were out-of-school of which girls accounted for more than one half (UNESCO, 2009). Similarly, child labour also has a gender dimension which is largely documented in the literature (see e.g., Allias et al. 2008, ILO/UCW 2006, Thiam

2005). Boys and girls often do different jobs. While boys tend to be engaged more in economic activities, girls are more likely to carry out household chores. As a result, the relation between child labour and education can vary according to gender. Figures 3 and 4 show the extent to which child labour declined when school attendance and primary school completion rates increased, by gender. In Vietnam, boys and girls remain equally likely to attend school. Although boys' PCR moved faster to close the gender gap in favor of girls, both boys and girls equally benefited from the overall decline in child labour. The proportion of child labourers remained the same for both groups: 24% in 2000 and about 15% in 2006.

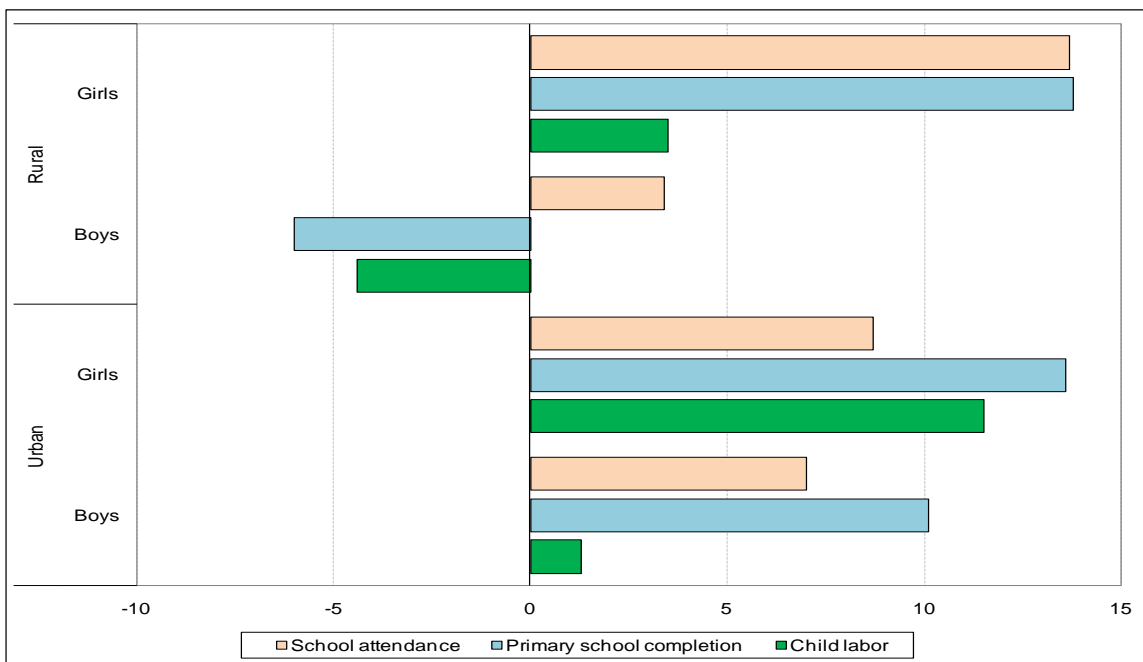
Similarly, in Niger where girls remained disadvantaged in schooling, school attendance increased by about 7 percentage points for both boys and girls but the increase rate in primary school completion is twice higher among boys. Despite this higher performance of boys' PCR, the reduction rate in child labour is similar across gender, and there is no gender difference in labour participation over time. In fact, child labour dropped from 69% to 43% among boys and from 64% to 43% among girls.

In contrast, in urban areas in Gambia where school attendance and primary school completion increased for both boys and girls at similar rates, child labour remained stable at about 12% among boys while increasing among girls from 10% to 21% (figure 4). However, the average number of hours worked per week dropped from 23 to 8 among boys and from 28 to 11 among girls. The increase in child labour among urban girls confirms the conclusion of other studies on sub-Saharan Africa (see e.g., Kobiane 2003, Marcoux 1994, Pilon 1995) where in urban areas there is a high demand for girls' participation in domestic work because of the limited number of child care institutions and women are more and more inclined to undertake external economic activities. In rural areas in Gambia, increases in school attendance and primary completion rates had little effect on the prevalence of child labour, regardless of gender.

**Figure 3:** Change in percentage points in school attendance, primary school completion rate and child labour, by gender.



**Figure 4:** Change in percentage points in school attendance, primary school completion rate and child labour, by gender and residence, Gambia.



## The urban/rural divide

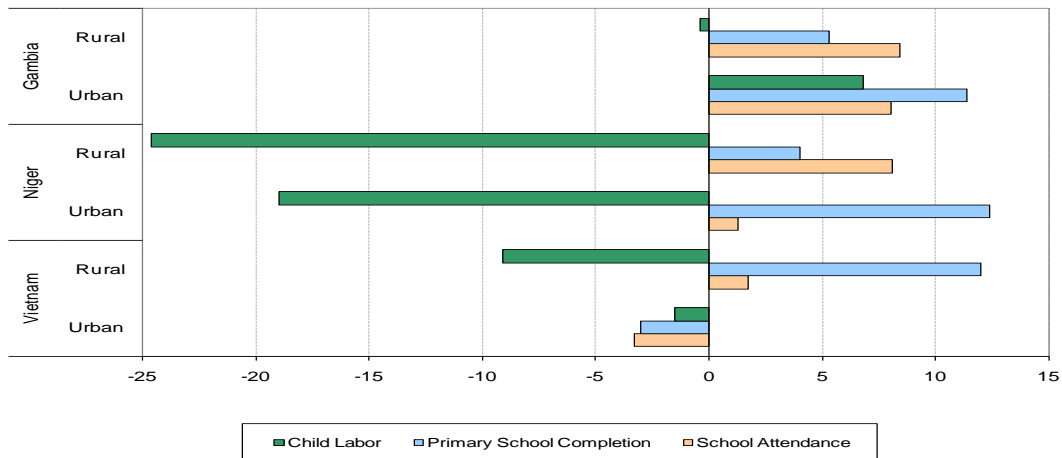
Despite the overall progress toward universal primary education, sub-national disparities in school participation persist between urban and rural areas (UNESCO, 2008). Analysis of the data shows that in all 3 countries, children from rural areas have lower school attendance and primary school completion rates, and remain more likely to engage in child labour. Moreover, urban and rural areas differ in terms of how changes in schooling and child labour are related (figure 5).

In Vietnam where school attendance rates remained stable and high, the increase in primary school completion rate in rural areas from 67% to 79% was accompanied with a significant decline in child labour from 27% to 18% (i.e. by 1/3). In urban areas, PCR remained close to 90% while child labour was also stagnant at about 7%, and thus significantly reducing the urban-rural gap in both PCR and child labour.

In Niger, the significant reduction in the proportion of child labourers was associated with an increase in primary school completion rate in urban areas from 31% to 44% (i.e., by 40%) while in rural areas it was accompanied with an increase in school attendance from 24% to 32% (i.e., by 33%). Interestingly, the reduction rate in child labour in urban and rural areas is nearly equal to the increase rate in PCR and school attendance, respectively.

Although the proportion of child labourers in rural areas in Gambia remained stable at 29% while school attendance was improved from 46% to 55%, the average number of hours of work per week significantly dropped from 34 to 13. As a result of the increase in child labour among urban girls, the overall prevalence of child labour in urban areas increased over time despite the improvement in schooling. However, the time spent in labour activities was also significantly reduced from 47 to 17 hours on average per week.

**Figure 5:** Change in percentage points in school attendance, primary school completion rate and child labour, by residence.



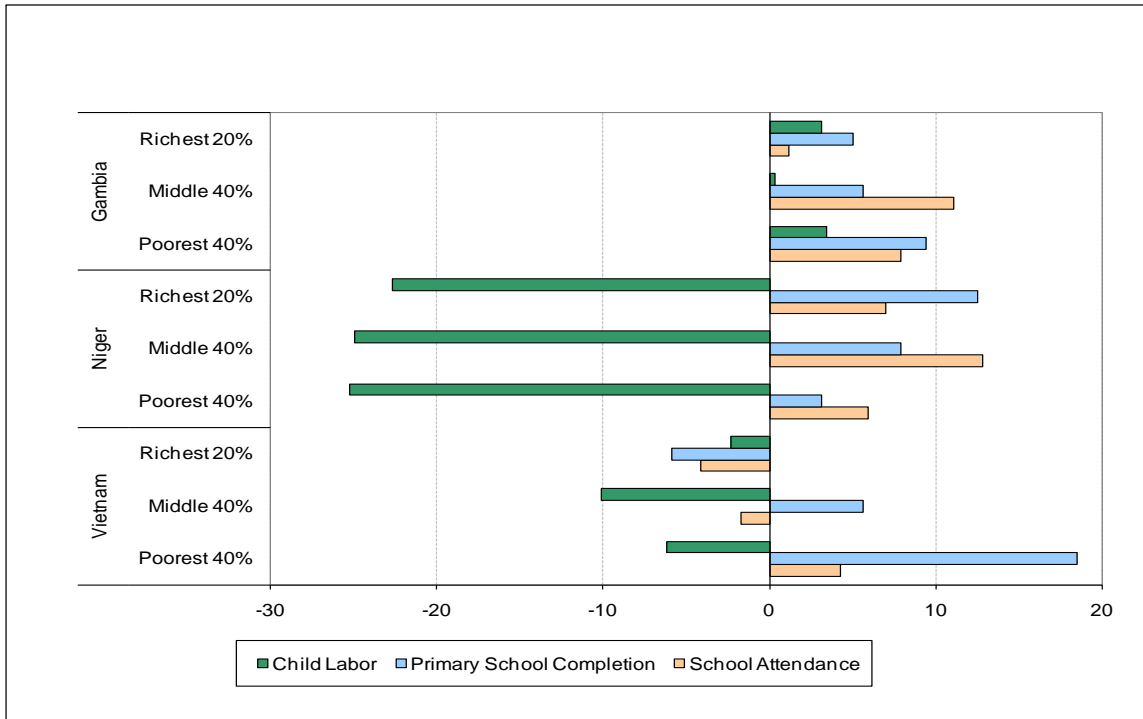
## Household wealth

Many studies have documented the relationship between poverty and child labour and between poverty and education (see e.g., Blunch et al. 2000, Huebler 2008, Filmer and Pritchett 1999). Access to education is particularly constrained for the poor and poverty is often the main reason why children engage in child labour. As expected, in all 3 countries children in poor households consistently have lower school attendance and primary school completion rates, and remain more engaged in child labour.

In Vietnam, in the poorest households the significant increase in the primary school completion rate from 53% to 72% (by 36%) was accompanied with a modest decline in child labour from 30% to 24%. In rich households, child labour remained low as schooling remained high at about the same level.

In Niger, although the absolute change in school attendance and primary school completion rate is the lowest among children from the poorest households, the absolute change in child labour is similar across all wealth groups. In contrast in Gambia, child labour remained stable across all wealth groups although children from poor households have higher improvement in schooling.

**Figure 6:** Change in percentage points in school attendance, primary school completion rate and child labour, by household wealth.



## **Conclusion**

This paper confirms the negative relationship between child labour and schooling in all 3 countries. Improvement in school attendance and primary school completion is associated with a decline in the proportion of child labourers in Niger and Vietnam. In Gambia where child labour remained stable over time, improvement in schooling was accompanied with a 60% reduction in the average number of hours children spent in labour activities.

Although improvement in schooling varies by gender, its impact on the prevalence of child labour does not necessarily differ among boys and girls. In contrast, across the 3 countries, urban and rural areas differ in terms of how changes in schooling affect the prevalence of child labour.

Child labour remains significantly higher among children from poor households than children from rich households, thus confirming the hypothesis about poverty being the main reason for children's participation in labour activities. Not surprisingly, in poor households in Gambia and Vietnam high increase rates in schooling are associated with a modest improvement in child labour. However, in Niger where the prevalence of child labour is much higher than in the 2 other countries, a small percentage point change in school attendance and primary completion rates in poor households is associated with a significant improvement in child labour. These results confirm that eliminating child labour among the poor would require that a significant effort be made to improve schooling for the poor. But in the context of high prevalence of child labour such as in Niger, child labour can be reduced even from small gains in schooling.

Many developing countries are not on-track to achieve the goal of universal primary education by 2015. In some of these countries such as Niger, child labor is often more predominant than schooling among primary school age children, and therefore represents a challenge for EFA. Monitoring child labor along with progress in education should then be given full attention, particularly in the context of FTI which aims to accelerate progress towards the goal of universal primary education. This might be done by including in the FTI Indicative Framework an indicator of child labour. However, progress in education is monitored annually mainly through the collection of indicators from administrative records while data on child labor is primarily collected from household surveys which are conducted every few years - typically every 5 years. Monitoring child labor within FTI would require a more frequent data collection, which in turn requires a data collection instrument that can be administered repeatedly in any given country, for example every 3 years, and over a sufficient period of time to confidently assess the status of child labor in FTI countries. This instrument should be designed so as to allow the collection of comprehensive data on child labor in all its forms at both national and sub-national levels.

The incidence of child labor is high among vulnerable children such as girls, orphans, ethnic and minority groups and street children who also represent the majority of the out-of-school population. Therefore, identifying these out-of-school children within each country is also important for the monitoring of child labor.

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## Annex

### Gambia

		School attendance ratio		Primary school completion rate		Proportion of child labourers	
		2000	2006	2000	2006	2000	2006
<b>Gender</b>	Boys	55	60	75	75	23	20
	Girls	50	62	58	72	22	29
<b>Residence</b>	Urban	66	74	73	84	10	17
	Rural	46	55	62	68	29	29
<b>Household wealth</b>	Poorest 40%	44	52	59	68	28	31
	Middle 40%	54	65	68	74	23	23
	Richest 20%	75	76	81	86	8	11
<b>Total</b>		53	61	66	74	23	25

### Niger

		School attendance ratio		Primary school completion rate		Proportion of child labourers	
		2000	2006	2000	2006	2000	2006
<b>Gender</b>	Boys	38	46	19	28	69	43
	Girls	25	31	11	14	64	43
<b>Residence</b>	Urban	68	69	31	44	45	26
	Rural	24	32	11	15	71	46
<b>Household wealth</b>	Poorest 40%	22	28	8	11	72	47
	Middle 40%	22	35	8	16	70	45
	Richest 20%	62	69	32	44	51	29
<b>Total</b>		31	38	15	21	66	43

### Vietnam

		School attendance ratio		Primary school completion rate		Proportion of child labourers	
		2000	2006	2000	2006	2000	2006
<b>Gender</b>	Boys	94	94	67	81	24	15
	Girls	93	95	75	82	24	16
<b>Residence</b>	Urban	97	94	91	88	8	7
	Rural	93	95	67	79	27	18
<b>Household wealth</b>	Poorest 40%	89	93	53	72	30	24
	Middle 40%	97	96	83	88	24	14
	Richest 20%	99	95	92	86	7	4
<b>Total</b>		94	94	71	81	24	16

**School attendance**

	Urban		Rural		National	
	2000	2006	2000	2006	2000	2006
Boys	68	75	49	53	55	60
Girls	64	72	43	57	50	62
<b>Gambia</b>	<b>66</b>	<b>74</b>	<b>46</b>	<b>55</b>	<b>53</b>	<b>61</b>

**Primary school completion**

	Urban		Rural		National	
	2000	2006	2000	2006	2000	2006
Boys	78	88	74	68	75	75
Girls	68	81	53	67	58	72
<b>Gambia</b>	<b>73</b>	<b>84</b>	<b>62</b>	<b>68</b>	<b>66</b>	<b>74</b>

**Child labor**

	Urban		Rural		National	
	2000	2006	2000	2006	2000	2006
Boys	11	12	29	25	23	20
Girls	10	21	29	33	22	29
<b>Gambia</b>	<b>10</b>	<b>17</b>	<b>29</b>	<b>29</b>	<b>23</b>	<b>25</b>

## Average number of hours of work per week done by primary school age children

### Gambia (7-12 years old)

	Economic activities						Household chores						Total number of hours					
	Urban		Rural		Total		Urban		Rural		Total		Urban		Rural		Total	
	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006
Boys	19	9	15	7	16	7	23	8	19	7	19	7	46	16	33	14	34	14
Girls	20	7	15	6	16	6	28	11	22	7	23	8	48	18	36	13	38	14
Total	19	7	15	6	16	6	26	10	20	7	21	8	47	17	34	13	37	14

### Niger (7-12 years old)

	Economic activities						Household chores						Total number of hours					
	Urban		Rural		Total		Urban		Rural		Total		Urban		Rural		Total	
	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006
Boys	18	5	32	3	31	3	15	13	18	23	18	22	32	18	49	26	48	25
Girls	12	4	23	2	22	2	23	17	27	24	26	23	35	20	50	26	48	26
Total	15	4	28	3	27	3	20	15	22	23	22	23	34	19	50	26	48	25

### Vietnam (6-10 years old)

	Economic activities						Household chores						Total number of hours					
	Urban		Rural		Total		Urban		Rural		Total		Urban		Rural		Total	
	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006	2000	2006
Boys	18	12	17	13	17	13	8	10	11	13	11	13	17	20	26	25	26	24
Girls	9	7	14	11	13	10	15	12	14	13	14	13	23	19	26	23	26	23
Total	13	9	15	12	15	12	13	11	13	13	13	13	22	19	26	24	26	23