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Child labour and education: Evidence from SIMPOC surveys

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Summary of main findings

An in-depth analysis of a diverse sample of SIMPOC national child labour survey data from all world regions yields the following key results:

1. Child labour and the achievement of Education for All (EFA) are negatively correlated. The former acts as a significant barrier to the achievement of EFA. At the national level, a higher incidence of child labour is generally associated with lower values in the Education Development Index (EDI), which is a yardstick for measuring EFA achievements. However, the lack of an accessible and affordable education infrastructure can also act as a push factor for children to take up work.

2. Child labour leads to reduced human capital formation. It lowers net primary enrolment ratios. Also, high levels of child labour are usually associated with low literacy rates. There is a significant correlation between levels of economic activity of children aged 7-14 years and youth literacy rates in the 15-24 age bracket.

3. Boys and girls often do different jobs. Employment patterns tend to be gender-specific. As a result, the impact of child labour on education for boys and girls can vary. Girls, for instance, are usually overrepresented in non-economic activities such as work in the "own household". They also often bear the double burden of work outside and inside the house, with little time left for schooling.

4. There is a strong effect of child labour on school attendance rates. Cross-country data reveal that with increasing levels of economic activity of children, school attendance rates decline. There is often a significant "school attendance gap" between working and non-working children. Many child labourers are constrained in their school attendance by long hours of work or difficult working conditions. Others do not attend at all. In some countries school attendance rates of working children are only about half of those of non-working children.

5. The length of a child's work day is negatively associated with his or her capacity to attend school. Long hours of work, especially more than 14 or 21 hours per week increases the school attendance gap. Non-economic activities such as household chores also play a role, but less so in terms of their effect.

6. Rural working children tend to be among the most disadvantaged. Enrolment and attendance figures in rural areas present lower values than in urban areas; a divide that is further exacerbated by child labour. School attendance figures in rural areas differ considerably by work status. In one quarter of sample countries child labourers in rural areas faced a school attendance gap of 20 per cent or more vis-à-vis non-working children.

7. For those children combining work and education, performance at school often suffers. There is a significant correlation between the levels of economic activity and primary school repetition rates and school survival rates. The higher the prevalence of children's work, the more likely it is that children will drop out before finishing primary education.

1. Introduction

1. Child labour is widely recognized as a major hindrance to reach the Education For All (EFA) goals by restricting the right of millions of children to access and benefit from education. Large numbers of child labourers are denied the fundamental opportunity to attend school, while those who combine work with schooling are often unable to fully profit from the education on offer.

2. The World Day Against Child Labour, commemorated around the world on 12 June every year, highlights in 2008 the important interrelationship of child labour and education. While premature involvement in work acts as an impediment to children's schooling, the provision of free and compulsory education of good quality up to the minimum age for entering employment has proven a key policy instrument in the fight against child labour.

3. International labour standards reflect this linkage. The ILO Minimum Age Convention, 1973 (No. 138) stipulates that the minimum age for admission to employment or work shall not be less than the age of completion of compulsory schooling.

4. Impressive strides have been made in all regions over the last few years to attain the EFA goals. The latest UNESCO statistics show that 75 million children of primary school age were out of school in 2006, as compared to a staggering 103 million in 1999[1]. The incidence of children's work also declined during that period. While still about one-sixth of the total child population ages 5 to 14 — i.e. 191 million children — were involved in some kind of economic activity in 2004, there were some 20 million fewer working children in this age group than there had been four years earlier.[2]

5. The ILO's most recent Global Report on child labour emphasized the important contribution that action against child labour can make to the Education For All process.[3] Yet, it also noted that the objectives of the latter will only be achieved if child labour concerns are effectively mainstreamed into the EFA monitoring and promotional efforts. Much remains to be done in this respect. Quite significantly, the report described the EFA and child labour movements as "two ships passing in the night".

6. This paper aims at stimulating the debate on what needs to be done in order to bring the two fields of action closer together. It reviews descriptive evidence of the impact of child labour in terms of the overall education life cycle. A strong emphasis is made on the effects of child labour on school attendance, grade repetition, dropout, literacy achievements and overall human capital accumulation.

7. The paper is based on an in-depth analysis of available data from national household-based child labour surveys (NCLS) conducted between 1998 and 2006 with the assistance of ILO-IPEC's Statistical Information and Monitoring Programme on Child Labour (SIMPOC)[4]. The dataset underlying the analysis includes 34 countries from all

[1] UNESCO Institute for Statistics (at www.uis.unesco.org/ev.php?ID=7194_201&ID2=DO_TOPIC) and UNESCO : EFA Global Monitoring Report 2008: Education for all by 2015 – Will we make it? (Paris, UNESCO, 2008)
[2] Hagemann, F., Diallo Y., Etienne, A., Mehran, F.: *Global child labour trends 2000 to 2004* (Geneva, ILO/IPEC, 2006)
[3] ILO: *The end of child labour: Within reach* (Geneva, ILO, 2006)
[4] Henceforth referred to as SIMPOC surveys. For more information on SIMPOC surveys, see www.ilo.org/ipec/childlabourstatisticssimpoc.

major world regions, including developed economies.[5] It constitutes a comprehensive and diverse sample. Country data are presented for the age group 7 to 14, which is the appropriate age range for the purpose of comparison with relevant primary and lower secondary education age cohorts[6]. These child labour data were analysed together with education data from UNESCO's latest EFA Monitoring Report[7]. Our intention was to derive broad indications of correlations between key child labour and education variables. Simple linear regressions were used as the main analysis tool.[8] The main question driving the research was "*How does the child labour situation in different countries affect the main schooling indicators?*" The following sections seek to respond to this question. Section 2 examines the broad correlation of child labour with a country's status in terms of achieving Education For All. The subsequent section then deals with the effect of children's work on school attendance. Section 4 treats more specifically the consequences of work on dropout and repetition rates and the problem of late entry and early exit of children from the schooling system. Finally, Section 5 concludes the paper and points to further research needs.

2. Child labour and Education for All goals

8. The World Education Forum in Dakar in the year 2000 established six fundamental goals to be achieved by 2015.[9] These are:

   (i) Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children;

   (ii) ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality;

   (iii) ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes;

   (iv) achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for adults;

   (v) eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality; and

[5] Eighteen of the national surveys were carried out as stand-alone national child labour surveys; 16 were included as a module in other household-based surveys, such as labour force surveys. Cross-country comparison should be cautioned against because of different reference years. Also, SIMPOC survey instruments are usually adapted to country needs and may thus differ.

[6] The analysis is based on data of "working children" in the age group 7 to 14. Working children are comprised of economically active children but do not include children seeking work. Child labourers are a sub-group of working children and do not include children in permissible light work. Note that according to the ILO's latest global estimates (Hagemann et al, 2006) child labourers account for 87 per cent of working children in the age group 5 to 14. For the purpose of this paper and the more restricted age group 7 to 14 we use the terms "child labourers", "working children" and "economically active children" interchangeably.

[7] UNESCO 2008, op.cit.

[8] We are grateful to the "Understanding Children's Work" project (UCW) for providing analytical assistance to this paper.

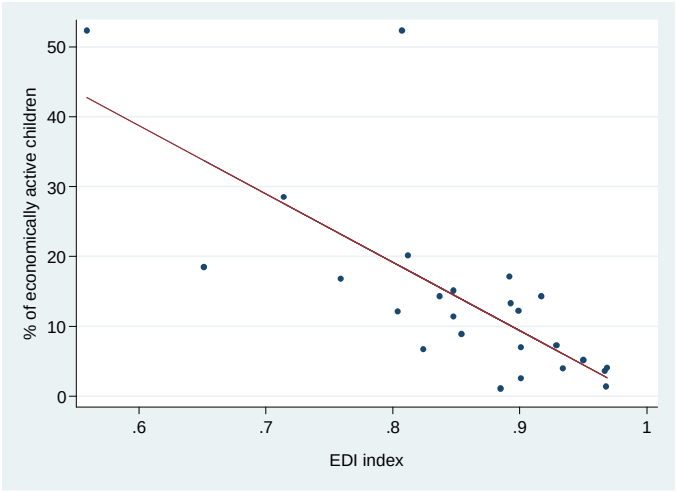
[9] World Education Forum: *The Dakar Framework for Action, Education for All: Meeting our Collective Commitments* (Paris, UNESCO, 2000).

(vi) improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

9. In an effort to capture the overall progress towards the achievement of the above, the 2008 EFA Report[10] presents a composite measurement tool, the Education Development Index (EDI), which synthesizes the Dakar Framework for Action in four quantifiable goals: universal primary education (UPE); adult literacy; quality of education and gender parity[11]. For instance, the higher a country's EDI value, the greater is the extent of its overall EFA achievement and the closer the country is to attaining the EFA goals as a whole.

10. Figure 1 shows that **higher levels of child labour are associated with lower EDI** values**.** Child labour is equally negatively correlated with many of the important subcomponents of the EDI such as universal primary education, youth/adult literacy and quality of education, as our discussion in the following sections will reveal. The causality underlying this relationship can be bi-directional. While child labour impedes the achievement of EFA goals, an under-performance on the latter can also provide incentives to children to take up work prematurely.

Figure 1: Education Development Index and child labour, children aged 7-14 years



Source: SIMPOC calculations based on SIMPOC national child labour surveys.

[10] UNESCO (2008) op.cit.

[11] In accordance with the principle of considering each goal to be equally important, one indicator is used as a proxy measure for each of the four EDI components and each component is assigned equal weight in the overall index. As a result, EDI values can vary from 0 to 100% or, when expressed as a ratio, from 0 to 1. UPE achievements are measured in terms of total primary net enrolment ratio (NER), which reflects the percentage of primary-school-age children who are enrolled in either primary or secondary school. The adult literacy rate is used as a proxy to measure progress towards the first part of goal 4. Quality of education is measured through the survival rate to grade 5, which is a proxy indicator available for a large number of countries. The fourth EDI component is measured by a composite index, the gender-specific EFA index (GEI). The GEI is calculated as a simple average of three Gender Parity Indices pertaining to primary education, secondary education and the adult literacy rate.

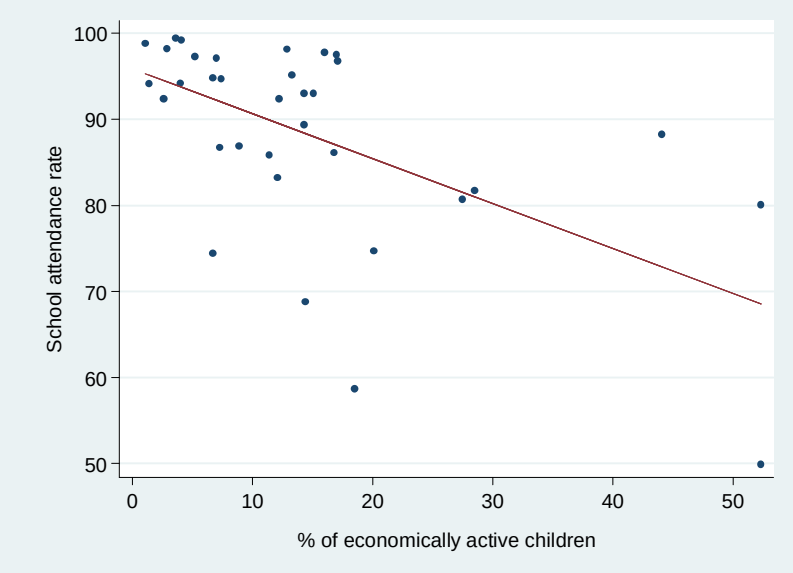
3. Evidence on child labour and school attendance

3.1 Key regression results

11. Child labour impacts negatively on school attendance rates. Figure 2 confirms this convincingly both for boys and girls together and the two sexes separately. A simple linear regression identifies a significant negative correlation. We note that as levels of economic activity of children increase, school attendance rates decline. In countries where child labour is a common phenomenon many children are excluded on a permanent basis from the education system (i.e., high levels of child labour translate into large numbers of out-of-school children). This, of course, puts a downward pressure on overall school attendance rates.

12. Figures 2(a) and (b) show that the negative correlation is seen more clearly in the case of boys than in girls.

Figure 2: School attendance and child labour, children aged 7-14 years



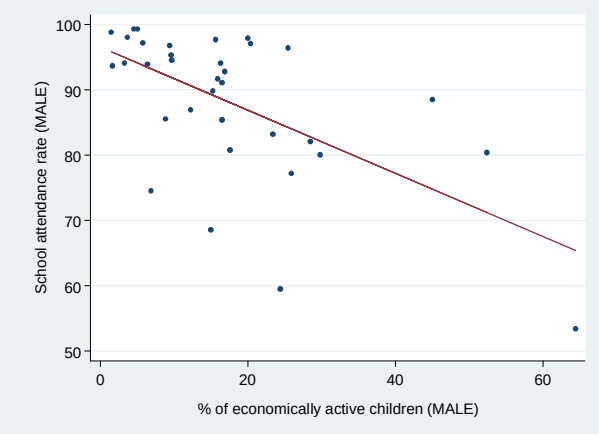


Figure 2 (a)

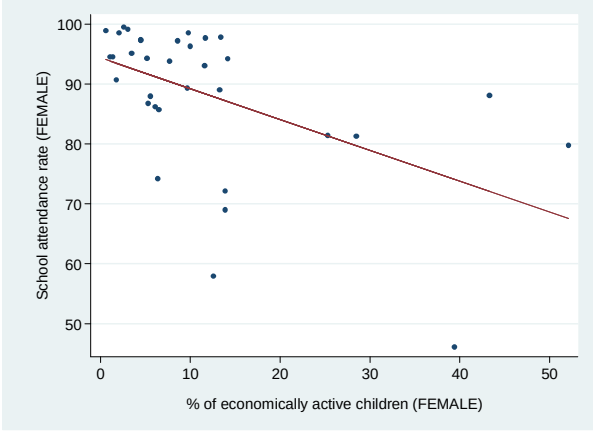


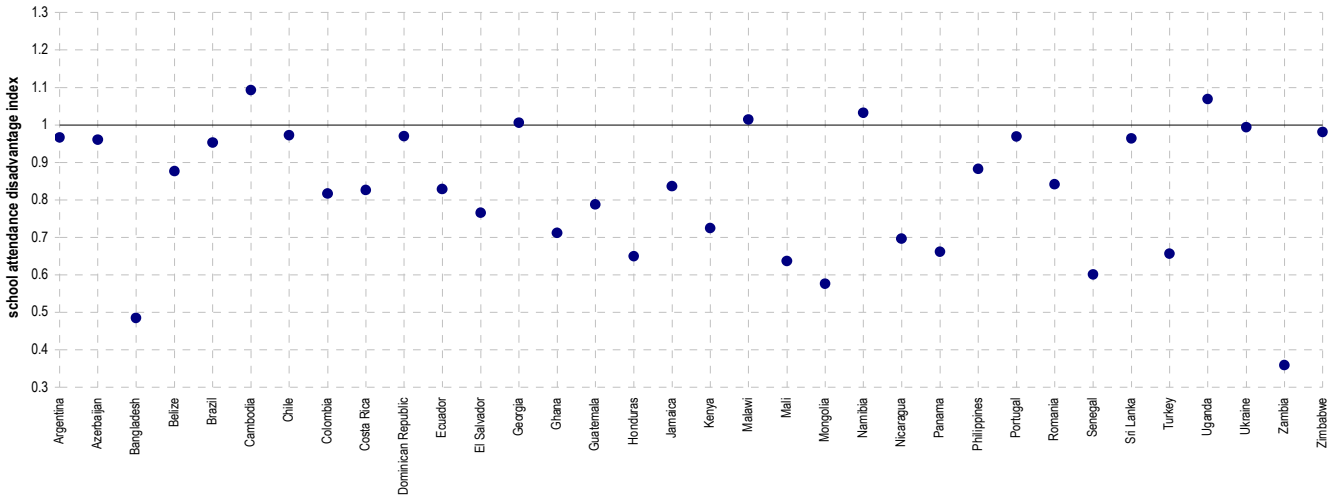
Figure 2(b)

Notes: School attendance rate refers to the number of 7-14 year-olds attending school expressed as a percentage of total children in this age group.
Source: SIMPOC calculations based on SIMPOC national child labour surveys.

3.2 School attendance at the country level: working children vs. non-working children

13. For the overwhelming majority of countries included in our sample, **working children are disadvantaged vis-à-vis their non-working counterparts in terms of their ability to attend school**. Figure 3 shows the school attendance gap between working and non-working children (i.e., school attendance rate of economically active children expressed as a ratio of the school attendance rate of non-economically active children). Working children face a disadvantage within a range of 10 percent in 9 countries, of 10 to 20 per cent in 7 countries and of more than 20 per cent in 13 countries. In certain countries the attendance gap between working and non-working children reaches rather dramatic dimensions. For instance, school attendance of working children in Zambia represents only about 35 per cent of that of non-working children. (The corresponding figures are 48 per cent for Bangladesh; 58 per cent for Mongolia; 60 per cent for Senegal; 64 per cent for Mali and 65 per cent for Honduras). However, there are also a few countries where working children have a slight attendance advantage, but the gap remains inferior to 10 per cent.

Figure 3: School attendance disadvantage[(a)] of working children, 7-14 years age group, selected countries



Notes: (a) The school attendance disadvantage index refers to the school attendance rate of economically-active children expressed as a ratio of the school attendance rate of non-economically active children. The smaller the index value, the higher is the disadvantage faced by economically-active children compared to children not involved in economic activity.

Source: SIMPOC calculations based on SIMPOC national child labour surveys.

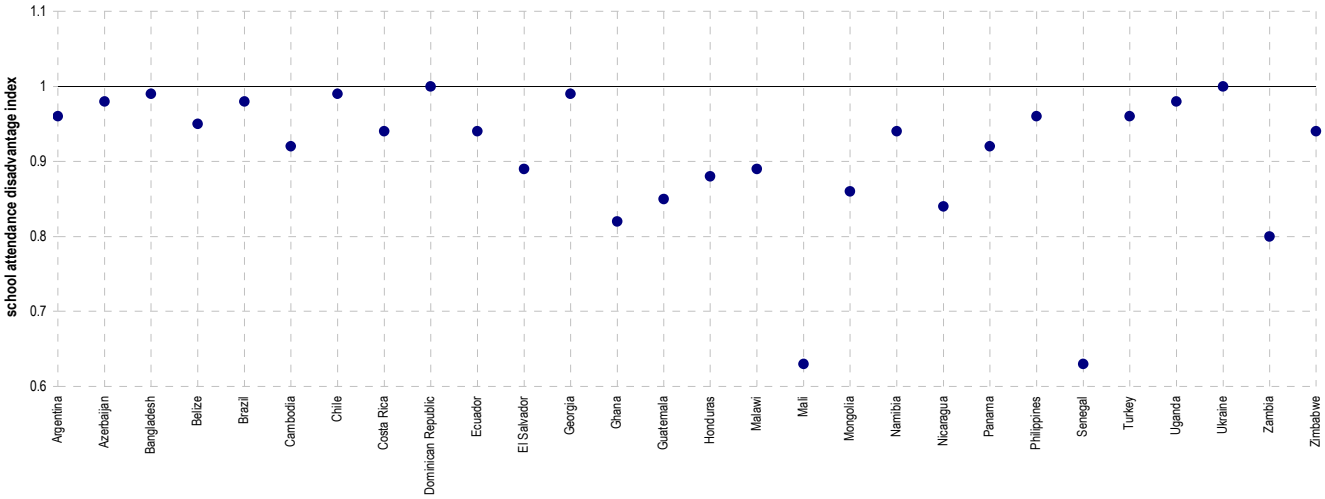
14. The relatively large differences between countries highlighted in Figure 3 are to be attributed to a number of factors such as (i) activity and intensity patterns of children's work in the specific national context and (ii) the length of the school day and the overall structure of the schooling calendar.

3.3 The rural dimension of school attendance inequality

15. **Children living in rural areas attend school less than their urban counterparts regardless of their working status** (Figure 4). This is an expected result given that, in most cases, economic pressure to engage children in working activities is higher in the

countryside due to both higher poverty density and more limited educational infrastructure.[12]

Figure 4: School attendance disadvantage[(a)] of children in rural areas vs. children in urban areas, 7-14 years age group, selected countries



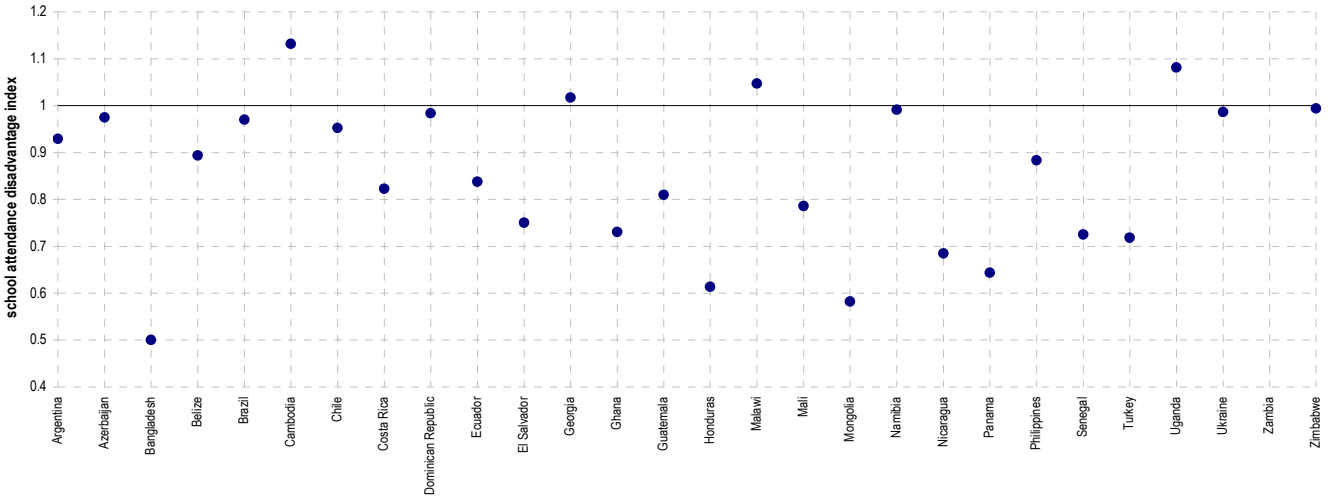
Notes: (a) The school attendance disadvantage index refers to the school attendance rate of children in rural areas expressed as a ratio of the school attendance rate of children in urban areas. The smaller the index value, the higher is the disadvantage faced by children in rural areas compared to children in urban areas.

Source: SIMPOC calculations based on SIMPOC national child labour surveys.

16. **School attendance figures in rural areas differ considerably by work status**. Figure 5 demonstrates that in rural areas working children face a considerable school attendance disadvantage vis-à-vis non-working children. There is a school attendance gap of less than 10 per cent in eight countries; of 10 to 20 per cent in five countries; and of more than 20 per cent in 10 countries. This suggests that besides the factors associated with educational infrastructure limitations, child labour may constitute in itself the main driving force behind low attendance rates in rural areas.

[12] Of course, there are significant differences in between rural areas, both with regard to the education on offer and the prevalence and types of child labour. In-depth country data analysis brings out these variations.

Figure 5: School attendance disadvantage[(a)] of working children in rural areas vs. non-working children in rural areas, 7-14 years age group, selected countries



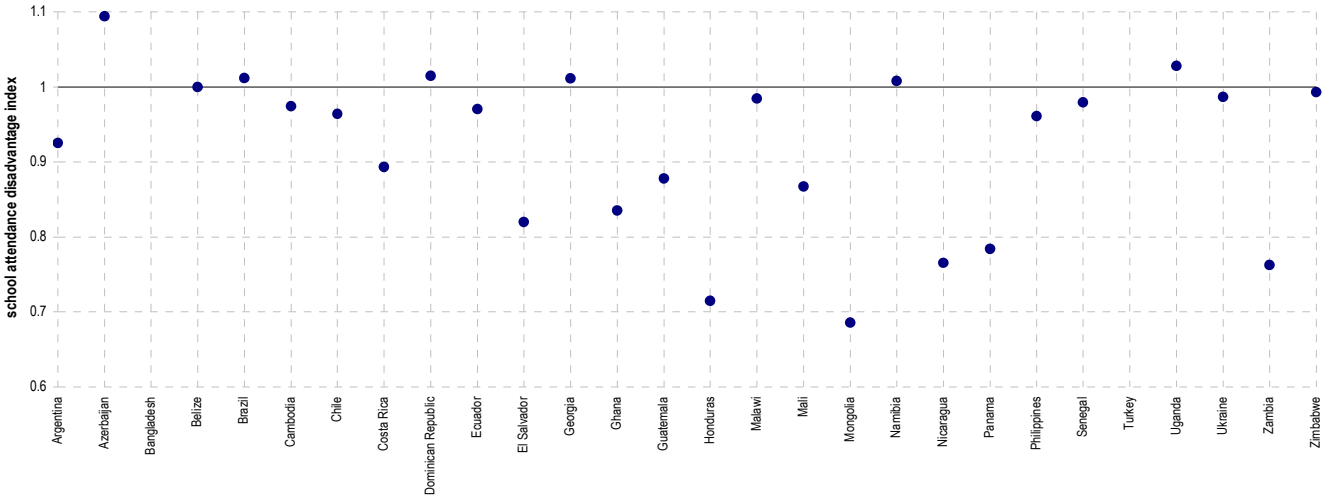
Notes: (a) The school attendance disadvantage index refers to the school attendance rate of working children in rural areas expressed as a ratio of the school attendance rate of non-working children in rural areas. The smaller the index value, the higher is the attendance disadvantage faced by working children as compared to non-working children in rural areas.

Source: SIMPOC calculations based on household survey datasets.

17. **The nature and intensity of work in rural areas is also likely to affect school attendance**. Figure 6 shows that working children in rural areas are disadvantaged with respect to working children in urban areas in terms of their ability to attend school. This is an indication that the nature and characteristics of work performed in rural environments – mainly agricultural activities - may have a more severe impact on the capacity of children to attend school. There are a number of factors that can explain these results. Restricted access to technology in developing countries causes agricultural work to be more intensive in terms of labour force participation and working hours. But work intensity tends to be higher in rural areas not only because of the number of hours worked, but also the demanding physical efforts required in agricultural work[13]. On the other hand, working intensity is a fundamental determinant of school attendance. Children working for a significant number of hours are predictably less able to attend school than those participating in labour activities for just a few hours per week; see the following section.

[13] A common method used to derive poverty estimations is the direct calorie intake (DCI) method. The DCI method usually differentiates the per capita calorie requirement by area of residence, recognizing that calories-intake needs can differ between rural and urban areas given the underlying differences in the nature of the activities performed in each specific environment.

Figure 6: School attendance disadvantage[(a)] of working children in rural areas vs. working children in urban areas, 7-14 years age group, selected countries



Notes: (a) The school attendance disadvantage index refers to the school attendance rate of working children in rural areas expressed as a ratio of the school attendance rate of working children in urban areas. The smaller the index value, the higher is the disadvantage faced by working children in rural areas compared to working children in urban areas.

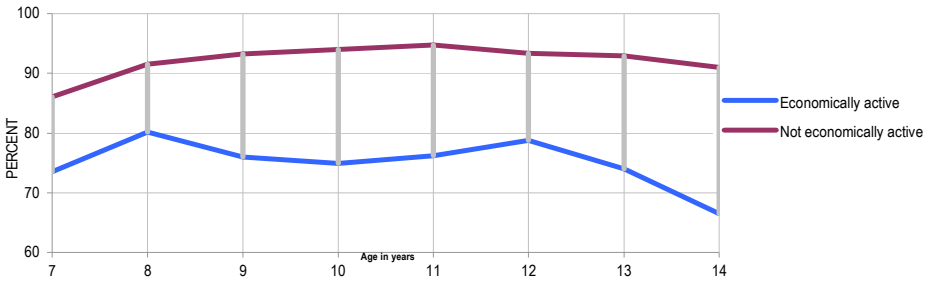
Source: SIMPOC calculations based on SIMPOC national child labour surveys.

3.4 School attendance by age: aggregate evidence and country examples

18. **School attendance rates by age and working status allow for differentiating the specific educational pathways of working children.** Figure 7 presents a weighted average of school attendance rates by age for all countries included in the sample, illustrating the gap between working and non-working children. It becomes clear that the school attendance gap remains a persistent feature throughout all ages. Initially, working children tend to be overrepresented among late school entrants[14]. Then patterns diverge and part ways, significantly so as of age 12, at the end of elementary education, when the weight of early school leavers among child labourers is starting to be felt.[15] A number of national data sets exemplify this trend either fully or in part. We shall turn to Panama (Fig.8), Brazil (Fig.9), Mongolia (Fig.10) and Portugal (Fig. 11).

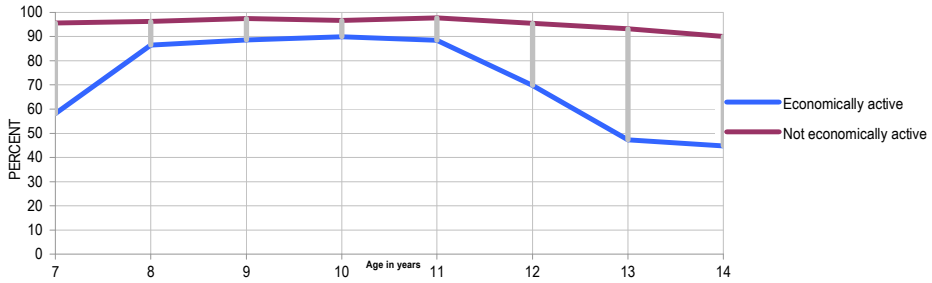
[14] Note that the slope of the line corresponding to the school attendance rate of working children is more pronounced than that for non-working children 7-8 years old.
[15] See also Section 4.2.

Figure 7: School attendance rate, by children's work status and age



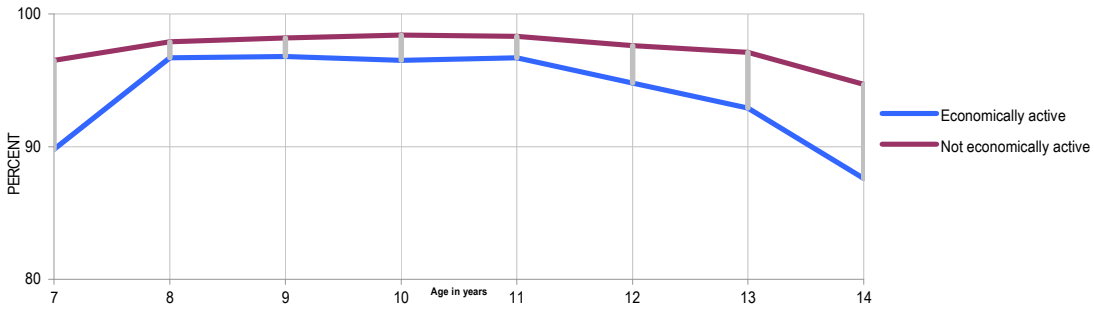
Source: SIMPOC calculations based on SIMPOC national child labour surveys.

Figure 8: Panama - School attendance rate, by children's work status and age



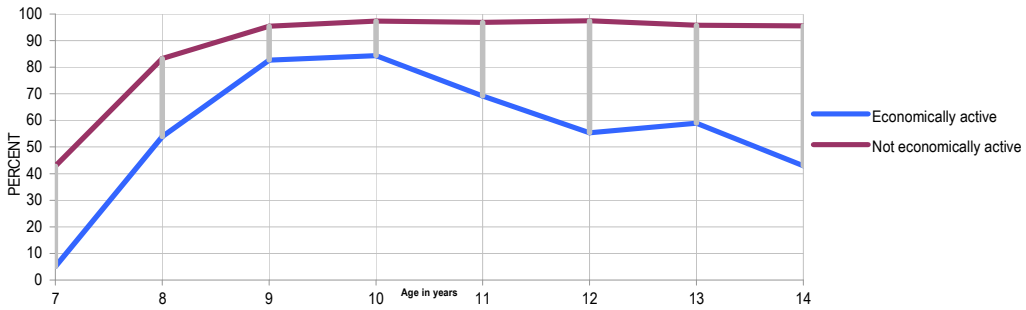
Source: Household-Labour Market Survey, Panama, 2000.

Figure 9: Brazil - School attendance rate, by children's work status and age



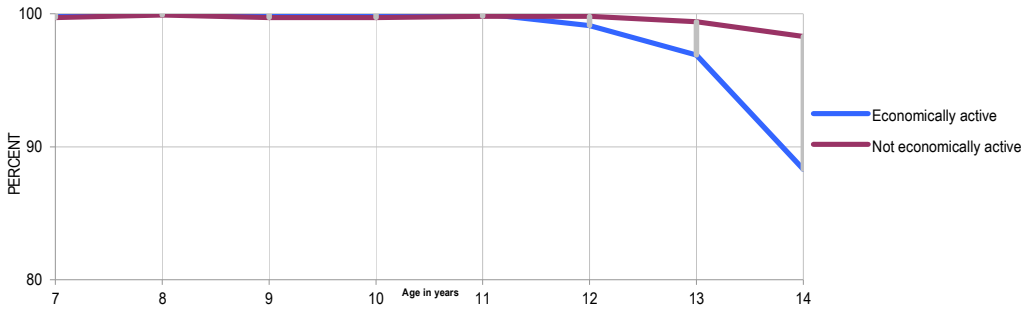
Source: Pesquisa Nacional por Amostra de Domicilios, Brazil, 2004.

Figure 10: Mongolia - School attendance rate, by children's work status and age



Source: National Child Labour Survey, Mongolia, 2002-03.

Figure 11: Portugal - School attendance rate, by children's work status and age



Source: Labour Force Survey, Portugal, 2001.

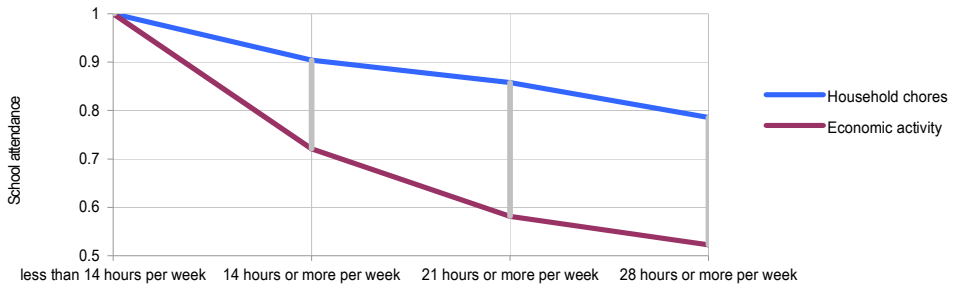
19. It has to be noted that the above aggregate evidence and country illustrations provide for some solid inferences about the impact of child labour on Universal Primary Education; one of the EFA goals and the first component of the EDI index (see Section 2). Non-entrance, late entrance and early leaving are significant factors reducing the numbers of primary-school-age children who are enrolled in either primary or secondary education.

3.5 The role of working hours on school attendance

20. **There is an inverse correlation between the number of working hours and the capacity of children to attend school**. It is important to recognize that "working status" alone is an incomplete indicator to depict the overall reality faced by working children. While some of them may be involved in working activities just for a few hours per week in line with national legislation and international conventions (for instance, in light work), others are obliged to work long hours jeopardizing effectively their participation in any meaningful schooling. Figure 12 presents average attendance rates for different working-hour thresholds.[16] Results are conclusive; as the number of hours of work in economic activities or household chores increases, school attendance possibilities are compromised. For example, average school attendance rates of economically active children working for 28 hours or more per week represent only 52 per cent of that corresponding to economically active children working for less than 14 hours per week. On the other hand, the average school attendance rate of children performing household chores for 28 hours per week represents 79 per cent of that corresponding to children in household chores for less than 14 hours per week.

[16] In Figure 12, the numbers correspond to weighted averages of school attendance rates on the y-axis and by hours worked either in economic activities or household chores on the x-axis. Specific attendance figures are expressed as a ratio of average school attendance rates for each hour-threshold taken as reference value (equal to 1) school attendance rates of children working less than 14 hours per week.

Figure 12: School attendance differentials by type of activity and hours worked



Source: SIMPOC calculations based on SIMPOC national child labour surveys.

21. **The evidence presented in Figure 12 suggests that different types of work can impact differently on the ability of children to attend school**. This is one among a variety of working categorizations that can be used to explore the different impacts on school attendance; for example, recent research by the Understanding Children's Work Project (UCW)[17] presented evidence on the different impacts on school attendance by type of work (i.e., economic activities vs. household chores) and by work setting (i.e., family vs. non-family)[18]. The findings suggest that some of the characteristics of household chores and family work could pose a lower barrier to the participation of children in the education system (i.e., flexible schedules or parents having a greater interest in safeguarding the education of their children). But this evidence remains indicative and should be interpreted with caution, since some of these children might be performing double duty (i.e., household chores and economic activities simultaneously); for children performing double duty the impact of work on education may be even higher than what is reflected in Figure 12. This is particularly important from a gender perspective since girls are usually overrepresented among the group of children in household chores, and in particular in long hours of housework.

4. Looking beyond school attendance

22. The preceding sections presented evidence emphasizing the impact of child labour on school attendance. However, child labour not only represents a severe obstacle to school attendance, it also interferes with the educational performance of children who combine school and work. As Table 1 shows, in a number of countries they represent the majority of working children. This section intends to shed light on the negative impact of working activities in educational performance by correlating economic activity levels with repetition grade rates, school dropouts, the total number of years spent in school and literacy rates.

[17] For more information on UCW, see www.ucw-project.org.
[18] Guarcello, L., Lyon, S., Rosati, F.*: Child labour and Education for All: An issues paper* (Rome, UCW, 2006).

Table 1: Percentage of children by activity status; SIMPOC surveys

Country	Children involved exclusively in economic activities	Children studying only	Children combining economic activity with school	Children neither involved in economic activities nor attending school
Argentina	0.6	85.8	12.3	1.3
Azerbaijan	0.3	92.4	4.9	2.4
Bangladesh	9.1	78.4	7.7	4.8
Belize	1.2	88.5	6.2	4.0
Brazil	0.7	88.8	7.7	2.8
Cambodia	8.6	36.5	43.7	11.3
Chile	0.1	95.4	4.0	0.7
Colombia	2.8	83.0	9.4	4.8
Costa Rica	1.4	89.5	5.3	3.8
Dominican Republic	1.0	80.7	16.1	2.3
Ecuador	3.0	81.7	11.3	4.0
El Salvador	2.8	80.9	6.0	10.3
Georgia	0.2	82.5	15.8	1.6
Ghana	10.4	63.7	18.1	7.9
Guatemala	7.7	62.4	12.3	17.5
Honduras	4.8	79.2	6.6	9.4
Jamaica	0.2	98.0	0.9	1.2
Kenya	3.0	70.7	3.7	22.6
Malawi	4.9	58.7	22.7	13.7
Mali	37.6	20.4	33	9.0
Mongolia	3.5	82.9	3.8	9.8
Namibia	1.4	79.3	13.7	5.6
Nicaragua	4.8	75.9	7.3	12.0
Panama	1.5	91.7	2.5	4.3
Philippines	2.0	83.8	11.3	2.9
Portugal	0.1	95.9	3.5	0.5
Romania	0.3	93.0	1.1	5.6
Senegal	11.5	51.6	7.1	29.8
Sri Lanka	0.9	81.4	16.1	1.6
Turkey	1.0	90.9	1.6	6.6
Uganda	3.7	47.8	40.4	8.0
Ukraine	0.1	95.4	2.8	1.7
Zambia	9.6	65.8	3.6	21.0
Zimbabwe	1.7	76.8	12.6	8.8

Source: SIMPOC surveys.

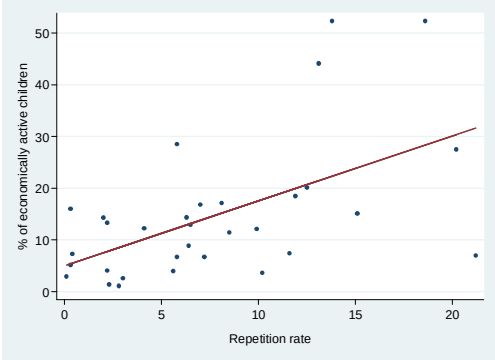
4.1 Primary school repetition

23. A significant correlation is found between the levels of economic activity and primary school repetition rates (Figure 13). This suggests that the combination of school and work could potentially affect children's ability to successfully comply with the requirements and workload of each grade. This is true for both boys and girls (Figure 13 (a) and (b)). Time invested in working activities reduces time available for studying or doing homework assignments and, of course, rest and leisure activities. Also, children who are exhausted by the demands of work are less likely to profit from their classroom time than their non-working counterparts. Grade repetition is likely to cause early dropout because:

- It could potentially influence household decisions in terms of investing resources in education vs. other alternatives.
- It results in over-age children relative to their grade. Since school and curricula are structured in terms of age and grade levels, and flexibility is not usually a feature of public mass education systems, over-age children are at a higher risk of becoming dropouts.

Grade repetition also leads to a waste of resources that otherwise could be invested in improving access and quality of education.

Figure 13: Grade repetition[(a)] and child labour, children aged 7-14 years, by sex



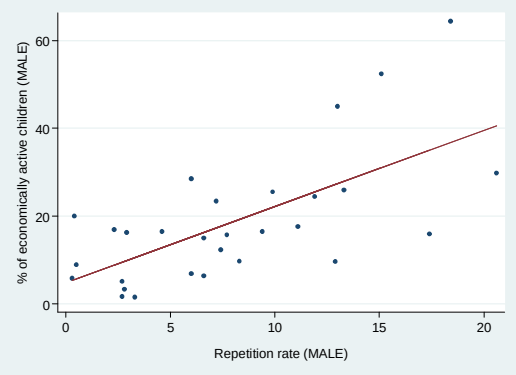


Figure 13(a)

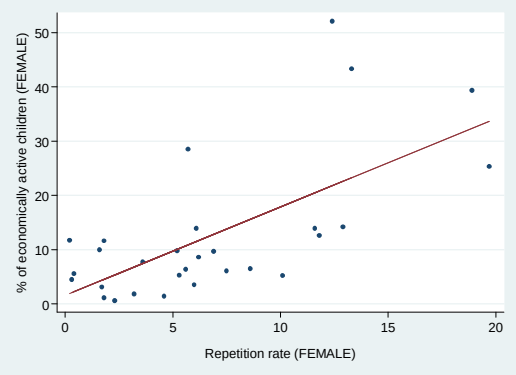


Figure 13(b)

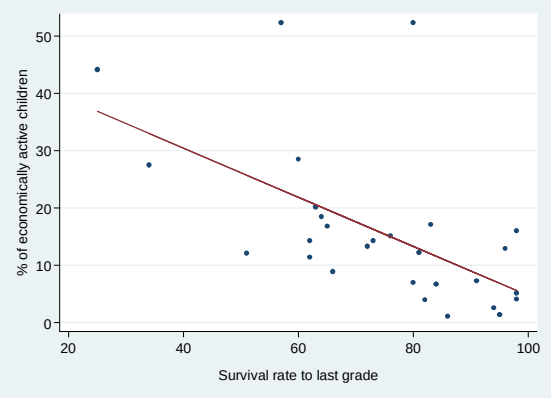
Notes: (a) Primary repetition rate refers to the number of students enrolled in the same grade as in the previous year, expressed as a percentage of all students enrolled in primary school.

Sources: (1) UNESCO, EFA Global Monitoring Report 2008 (for primary repetition rate); (2) SIMPOC calculation based on household survey datasets, various countries (for economically-active children).

4.2 School dropouts

24. Figure 14 refers to survival rates to the last grade of primary education (i.e., the percentage of a cohort of students who are enrolled in the first grade of an education cycle in a given school year and are expected to reach a specified grade, regardless of repetition). It is a proxy for the inverse of school dropout rates. **The prevalence of child labour is thus directly correlated to children's dropout before completion of primary education**. This certainly points out to interference of working activities with the ability not only to attend school but also to remain in it.

Figure 14: School survival rates[a] and child labour, children aged 7-14 years, by sex



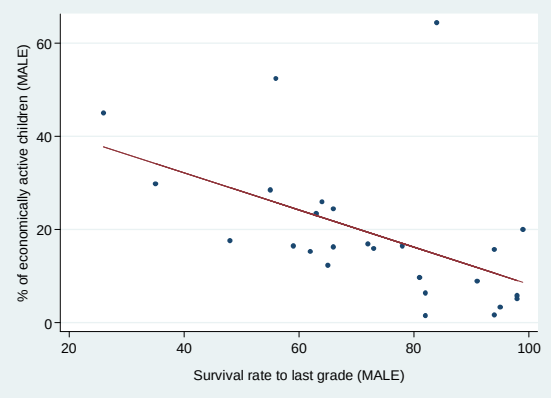


Figure 14(a)

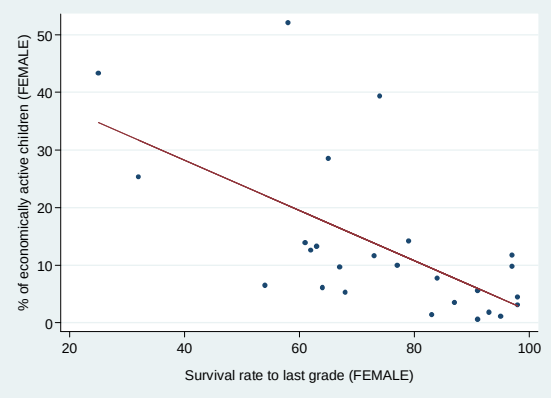


Figure 14(b)

Notes: (a) Survival rate by grade. Percentage of a cohort of students who are enrolled in the first grade of an education cycle in a given school year and are expected to reach a specified grade, regardless of repetition.

Sources: (1) UNESCO, EFA Global Monitoring Report 2008 (for survival rates); (2) SIMPOC calculations based on SIMPOC national child labour surveys, various countries (for economically-active children).

25. As discussed in Section 2, one of the components of the EDI index is "quality of education" proxied by survival rates up to grade 5[19] (see Section 2). Even if child labour does not directly impact the quality of education, it does affect the indicator selected to measure it.[20] From this perspective child labour has an important bearing on the "quality of education" subindicator of the EDI index.

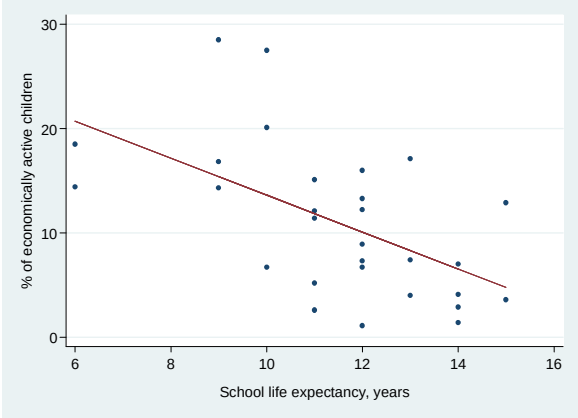
4.3 Number of years spent in schooling

26. The levels of children's work are significantly and inversely correlated to the number of years that a child will spend at school, as Figure 15 shows. This is seen in our data for both boys and girls and is regardless of grade repetition, resulting in lower levels of human capital accumulation

[19] Percentage of a cohort of students who are enrolled in the first grade of an education cycle in a given school year and are expected to reach fifth grade, regardless of repetition.

[20] Given the age range considered in this analysis, survival rates were taken up to the last year of primary education. This does not affect the conclusions, however.

Figure 15: School life expectancy[a] and child labour, children aged 7-14 years, by sex



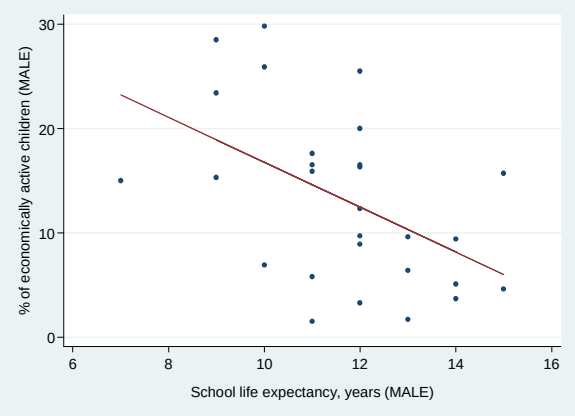


Figure 15(a)

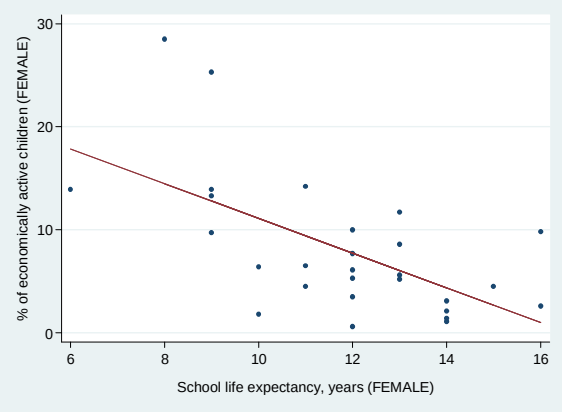


Figure 15(b)

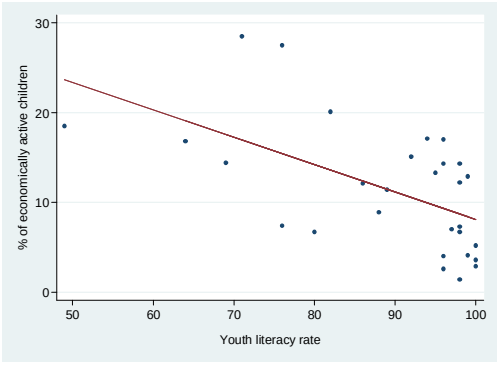
Notes: (a) *School* life *expectancy (SLE)* refers to the number of years a child of school entrance age is expected to spend at school or university, including years spent on repetition.

Sources: (1) UNESCO, EFA Global Monitoring Report 2008 (for school life expectancy); (2) SIMPOC-UCW calculation based on household survey datasets, various countries (for economically-active children).

4.4 Illiteracy

27. **There is a significant inverse correlation between levels of economic activity of children aged 7-14 and youth literacy rates in the 15-24 age group (Figure 16)**. This finding suggests that the consequences of child labour can be critical not only in terms of human capital accumulation in general, but also in acquiring key educational basic competencies such as the ability to read and write. The absence of these basic skills will leave youth and adults with very restricted options besides working in low remunerated jobs, recreating the conditions for the perpetuation of poverty, inequality and social exclusion.

Figure 16: Youth literacy rates[a] and child labour, children aged 7-14 years



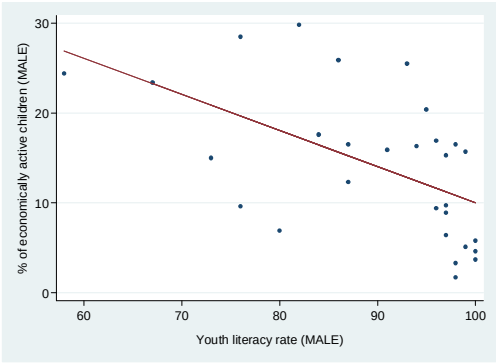


Figure 16(a)

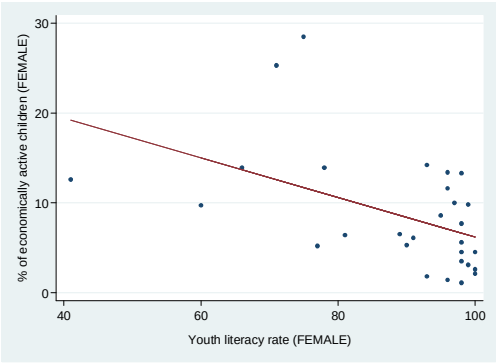


Figure 16(b)

Notes: (a) Youth literacy rate. Number of literate persons aged 15 to 24, expressed as a percentage of the total population in that age group.

Sources: SIMPOC calculations based on SIMPOC national child labour surveys.

28. The interference of child labour with efforts to improve literacy levels has a direct impact on the achievement of EFA as measured by the EDI index[21]. This explains to a large extent the significant correlation between EFA and child labour presented in Section 2.

5. Conclusions

29. Based on an in–depth analysis of SIMPOC national household survey data we have been able to illustrate some of the important negative effects of child labour on the Education for All agenda. Child labour and EFA achievement are negatively correlated – higher levels of the former are associated with lower values on the Education Development Index, a measurement of the latter. Working children, particularly in rural areas, are disadvantaged in their ability to attend school. School attendance rates tend to decline with higher levels of economic activity. We have also seen that there is an inverse correlation between the number of working hours and children's capacity to attend school. School attendance of children working 28 hours or more per week in economic activity is only about half of that of children in light work. Moreover, the paper established significant correlations between levels of economic activity and school repetition and dropout rates.

[21] Adult and youth literacy rates are closely correlated and partially overlapping measures.

30. Child labour has to be taken seriously as an important obstacle to reaching the Education for All goals. Efforts to eliminate child labour, and its worst forms in particular, should run in tandem and should be well coordinated with activities by the Education for All movement. Further and more in-depth research on the education – child labour nexus will be critical for that. For instance, in order to help design effective policy instruments, we need to know more about the impact of different kinds of work on children's schooling and school performance in particular. Gender dimensions will have to be paid to particular attention.

6. References

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7. Annex

SIMPOC national child labour survey datasets at the basis of this report

	Country	Year
1	Argentina	2004
2	Azerbaijan	2005
3	Bangladesh	2002/3
4	Belize	2001
5	Brazil*	2004
6	Cambodia	2001
7	Chile	2003
8	Colombia	2001
9	Costa Rica	2002
10	Dominican Republic	2000
11	Ecuador	2006
12	El Salvador	2001
13	Georgia	1999
14	Ghana	2000
15	Guatemala	2000
16	Honduras	2002
17	Jamaica	2002
18	Kenya	1998/99
19	Malawi	2002
20	Mali	2005
21	Mongolia	2002/3
22	Namibia	1999
23	Nicaragua	2000
24	Panama	2000
25	Philippines	2001
26	Portugal	2001
27	Romania	2001
28	Senegal	2005
29	Sri Lanka	1999
30	Turkey*	2006
31	Uganda	2001
32	Ukraine	1999
33	Zambia	1999
34	Zimbabwe	1999

* Successor data collection exercises based on previous SIMPOC surveys.