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Education for All 2000-2015: achievements and challenges

Evolution of the relationship between child labour and education since 2000

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Understanding Children's Work
An Inter-Agency Research Cooperation Project

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Evidence from 19 developing countries

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Working Paper

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As part of broader efforts towards durable solutions to child labor, the International Labour Organization (ILO), the United Nations Children's Fund (UNICEF), and the World Bank initiated the interagency Understanding Children's Work (UCW) Programme in December 2000. The Programme is guided by the Oslo Agenda for Action, which laid out the priorities for the international community in the fight against child labor. Through a variety of data collection, research, and assessment activities, the UCW Programme is broadly directed toward improving understanding of child labor, its causes and effects, how it can be measured, and effective policies for addressing it. For further information, see the project website at www.ucw-project.org.

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Evolution of the relationship between child labour and education since 2000

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ABSTRACT

Children's work is one of the main obstacles to Education for All (EFA). Children's work harms children's ability to enter and survive in the school system, and makes it more difficult for children to derive educational benefit from schooling once in the system. At the same time, education is a key element in the prevention of children's work. Understanding the interplay between education and children's work is therefore critical to achieving both EFA and child labour elimination goals.

The question of most interest in terms of policy, not captured by the static picture of children's work, is the direction in which countries are moving in terms of children's work and schooling, i.e., whether a higher or lower proportion of children are working and/or studying over time. The current Report is aimed at documenting the trends in children's time allocation between work and schooling in a sample of 19 developing countries since 2000.

Evolution of the relationship between child labour and education since 2000

Evidence from 19 developing countries

CONTENTS

LIST OF FIGURES AND TABLES

1. INTRODUCTION

1. Children's work is one of the main obstacles to Education for All (EFA). Children's work harms children's ability to enter and survive in the school system, and makes it more difficult for children to derive educational benefit from schooling once in the system. At the same time, education is a key element in the prevention of children's work. Understanding the interplay between education and children's work is therefore critical to achieving both EFA and child labour elimination goals.

2. The question of most interest in terms of policy, not captured by the static picture of children's work, is the direction in which countries are moving in terms of children's work and schooling, i.e., whether a higher or lower proportion of children are working and/or studying over time. The current Report is aimed at documenting the trends in children's time allocation between work and schooling in a sample of 19 developing countries since 2000.

3. The remainder of the Report is structured as follows. Section 2 provides an overview of the data sources and indicators utilized in the Report. Section 3 reports trends in division of children's time between work and schooling and Section 4 reports trends in the time intensity of children's work. Section 5 assesses trends in children's status in employment and how these differ between children only in employment and children combining employment and schooling. Finally, Section 6 reports another education indicator, grade-for-age, to show how children's employment impacts on their educational opportunities.

2. DATA SOURCES AND DESCRIPTION OF INDICATORS

4. The present Report makes use of datasets from nationally-representative ILO SIMPOC surveys, Demographic and Health (DHS) surveys, UNICEF MICS surveys and national household and labour force surveys. The selection of the countries (and data) included in the Report was guided by data considerations and by the objective of broad geographic representation. The Report includes countries with two comparable data points in most cases around ten years apart, with the first point referring to the early 2000s. The 19 countries covered in the Report, and the corresponding data sources and reference period for each, are detailed in Table 1.

Table 1. **Data sources**

Countries		*Base year survey*	*Most recent year survey*	*Data limitations*
Asia	Bangladesh	Child Labour Survey (CLS) 2002-2003	Labour Force Survey (LFS) 2005-2006	Information on household chores is not available for those children who are in employment, leading to an underestimation of the number of children in household chores. For the year 2005-2006, information on sector and status of employment is collected only for children in employment exclusively.
	India	National Sample Survey Office (NSSO) 2004	NSSO 2009-10	Does not capture children who combine work and school
	Indonesia	LFS 2001	LFS 2011	From the age of 10
	Vietnam	Multiple Indicator Cluster Survey (MICS) 2000	MICS 2011	Up to the age of 14
Africa	Burundi	MICS 2000	Demographic and Health Survey (DHS) 2010	Up to the age of 14
	Cameroon	MICS 2000	MICS 2011	Up to the age of 14
	Malawi	Second Integrated Household Survey (IHS2) 2004	Third Integrated Household Survey (IHS3) 2010-11	
	Senegal	MICS 2000	DHS 2010-11	Up to the age of 14
	Sierra Leone	MICS 2000	MICS 2010	Up to the age of 14
	Togo	MICS 2000	MICS 2010	Up to the age of 14
	Uganda	National Household Survey (NHS) 2005-06,	CLS 2011-2012	Information on weekly working hours from CLS 2011 excludes individuals working in subsistence agriculture.
	Zambia	LFS 2005	LFS 2008	
Latin America	Bolivia	Encuesta Continua de Hogares (ECH) 2003-2004	ECH 2009	
	Brazil	Pesquisa Nacional por Amostra de Domicílios (PNAD) 2001	PNAD 2011	
	Colombia	CLS 2001	CLS 2011	
	Ecuador	Encuesta Nacional de Empleo, Desempleo y Subempleo (ENEMDU) 2001	ENEMDU 2011	
	El Salvador	Encuesta de Hogares des Propositos Multiples (EHPM) 2001	EHPM 2011	
	Guatemala	Encuesta Nacional de Condiciones de Vida (ENCOVI) 2000	ENCOVI 2011	
	Mexico	Encuesta Nacional de Ocupación y Empleo con modulo the trabajo infantil (ENOE-MTI) 2007	ENOE-MTI 2011	

5. The datasets were selected to ensure data comparability across time *within countries*. However, survey instruments, reference years and reference periods differ somewhat *across countries*. This means that caution should be exercised in drawing cross-country comparisons.

6. Moreover, while in general the descriptive statistics are available for the group of children up to the age of 17 years, for some countries, i.e., Vietnam, Burundi, Cameroon, Malawi, Senegal, Sierra Leone and Togo, the information is available only for children up to the age of 14 years. Another exception is Indonesia, where the information on employment is only available starting from the age of 10. Other survey-specific data limitations relating to Bangladesh, India and Uganda are detailed in Table 1.

7. The indicators used in the Report are based on the definitions provided in Panel 1. The Report relies primarily on the concept of children's employment as a measure of their involvement in work (the concept of household chores is dealt with in Panel 2). Children's employment is a broader concept than child labour, covering all market production and certain types of non-market production (principally the production of goods and services for own use). It includes forms of work in both the formal and informal economy; inside and outside family settings; work for pay or profit (in cash or in kind, part-time or full-time), or as a domestic worker outside the child's own household for an employer (with or without pay).

Panel 1. **Definitions**

Employment: a child is considered to be in employment if he/she has worked during the week prior to the survey for at least one hour for pay (or without pay), profit, in kind, or family business. A person is also considered to be in employment if was not working but had a job to go back to.

School attendance: a child is considered to be attending school if he/she is currently attending school at the time of the survey.

Activity status: the identification of children in employment and children in school allows for the disaggregation of the child population into four non-overlapping activity groups - children in employment exclusively, children attending school exclusively, children combining school and employment and children doing neither.

Weekly working hours: refers to the average weekly working hours worked in the main employment

Status in employment: the indicator of status in employment distinguishes between the three main categories (a) wage (or paid) employee, (b) self-employed, (c) unpaid family workers, and (d) other information not elsewhere classified.

Sector of employment: the indicator sector of employment divides employment into different groups of economic activity. The groupings used in the present Report are (a) agriculture, (b) manufacturing, (c) services and (d) the category other, which includes mining, constructions, electricity gas and water, and activities not classifiable by economic activity.

Household chores: Children in other productive activities includes children who perform unpaid household services, that is, the production of domestic and personal services by a household member for consumption within their own household, commonly called "household chores".

3. EVOLUTION OF CHILDREN'S TIME USE PATTERNS

8. The ILO global estimates for the 12-year period beginning in 2000 indicate that this period was one of significant progress against child labour. There were almost 78 million fewer child labourers aged 5-17 years at the end of the period than at the beginning. In relative terms, the percentage of children in child labour fell from 16 percent in 2000 to less than 11 percent in 2012.

9. Trends in children's employment in our 19 countries are largely consistent with this global picture. Children's involvement in employment for the entire 7-17 years age range has fallen in all 19 countries. In many cases the decline has been dramatic. In Sierra Leone, for instance, children's employment fell from 70 to 40 percent, and in Togo from 73 percent to 41 percent. In Ecuador, the share of children in employment fell more than three-fold, from 24 percent to seven percent. In absolute terms, the decline in children's employment from 11 percent to less than seven percent in populous India is especially noteworthy.

10. Most children in employment in the 7-11 years and 12-14 years age ranges are also in *child labour* in accordance with international legal standards[2] and trends for these age ranges are therefore of particular interest. We see from Figure 1(b) and Figure 1(c) that there was a general decline in children's employment for both the 7-11 and 12-14 year-olds in the 19 countries. Indeed, only one of the countries – Bangladesh – experienced an appreciable rise in children's employment, and this rise was limited to the 7-11 years age group. But despite this progress, the prevalence of employment in these age groups remains far from negligible. This is especially the case for the Sub-Saharan Africa countries included in our sample. Over one-fourth of 7-11 year-olds, for example, remain in employment in Burundi, Cameroon, Sierra Leone, Togo, Uganda and Zambia.

11. Children's employment also fell among 15-17 year-olds in all countries in our sample except Bangladesh.[3] This result is more difficult to interpret, however, as child labour among 15-17 year-olds is limited to those in *hazardous* employment rather than those in employment generally. The general drop in employment could represent a (desirable) drop in hazardous employment but it could also reflect (undesirable) difficulties experienced by young people in finding decent jobs in the labour market.

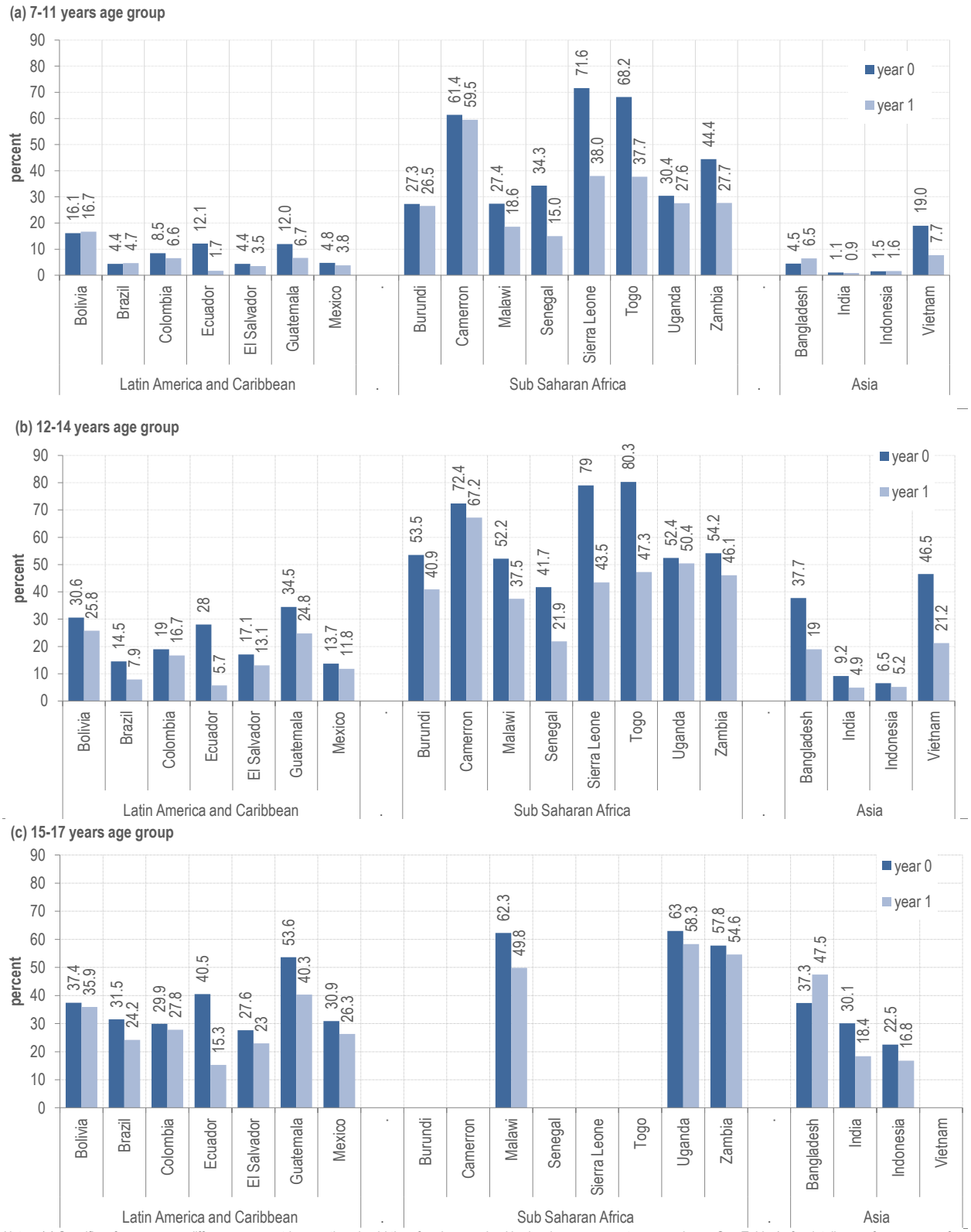
12. The general decline in children's employment was accompanied by a general *rise* in school attendance in our 19 sample countries across all age ranges (Appendix Figure A1). We now turn to changes in the interplay between employment and schooling in the 19 countries.

Figure 1 **Recent years have seen a fall in children's employment across all 19 countries**

[2] ILO Convention No. 138 (Minimum Age) (C138) calls on Member States to set a general minimum age for admission to work or employment of at least 15 years of age (Art. 2.3) (14 years of age in less developed countries), and a higher minimum age of not less than 18 years for employment or work which by its nature or the circumstances in which it is carried out is likely to jeopardise the health, safety or morals of young persons, i.e., hazardous work (Art. 3.1). However, the Convention states that national laws or regulations may permit the employment or work of persons from 13 years of age (12 years in less developed countries) on light work which is (a) not likely to be harmful to their health or development; and (b) not such as to prejudice their attendance at school, their participation in vocational orientation or training programmes approved by the competent authority or their capacity to benefit from the instruction received (Art. 7). Owing to the flexibility clauses in C138 left to the discretion of the competent national authority, the specific minimum working ages vary somewhat across the 17 sample countries.

[3] Data were not available for this age group in countries where the MICS survey was used as the data source.

Percentage of children in employment, base year and most recent year, by age group and country[a]



Notes: (a) Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country.

Source: UCW calculations based on national household surveys (see Table 1).

Figure 2 **The overall decline in children's employment frequently masks very different patterns for children combining employment and school and children working only**

Percentage of children combining employment and schooling and of children only in employment, base year and most recent year, by age range and country[a]

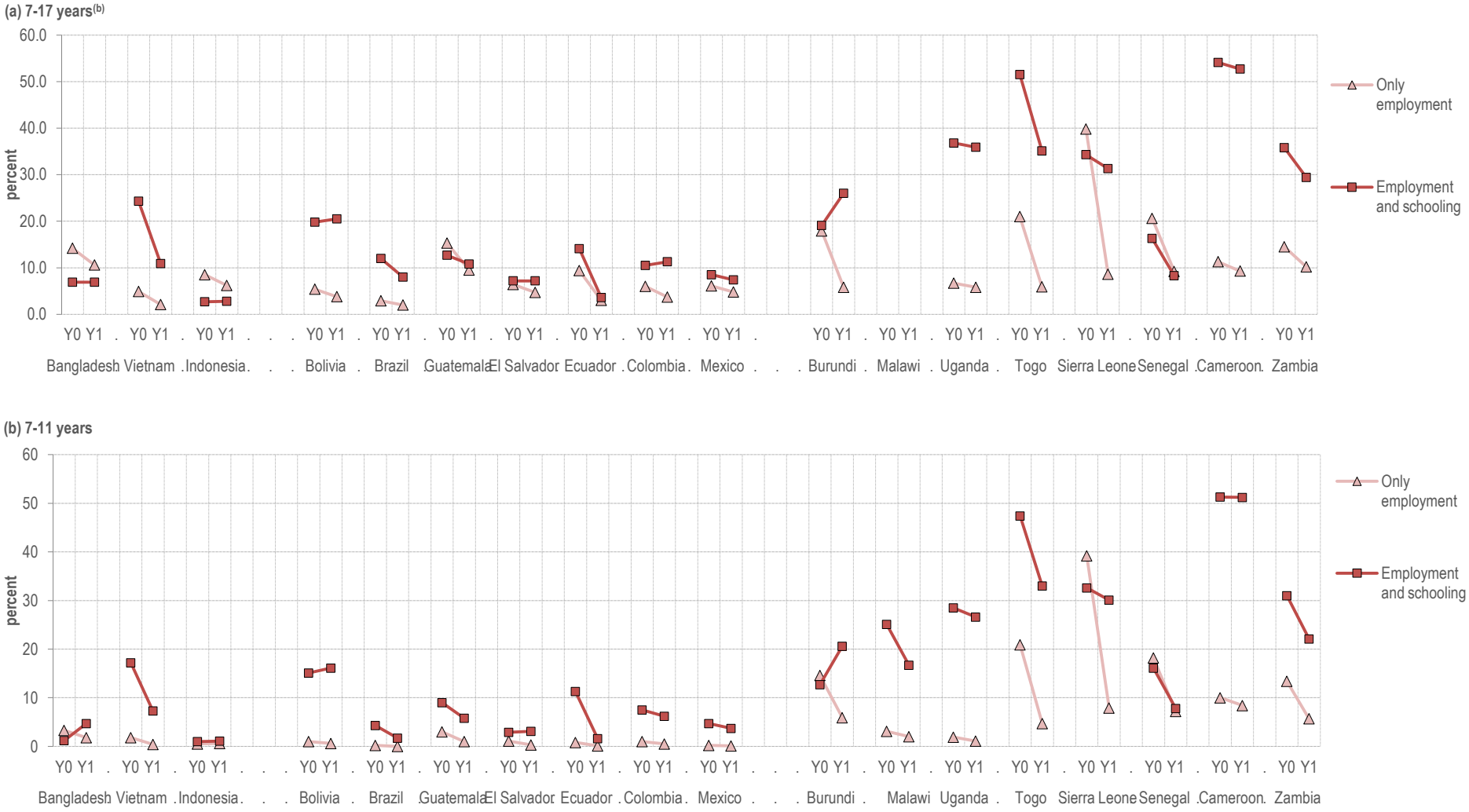
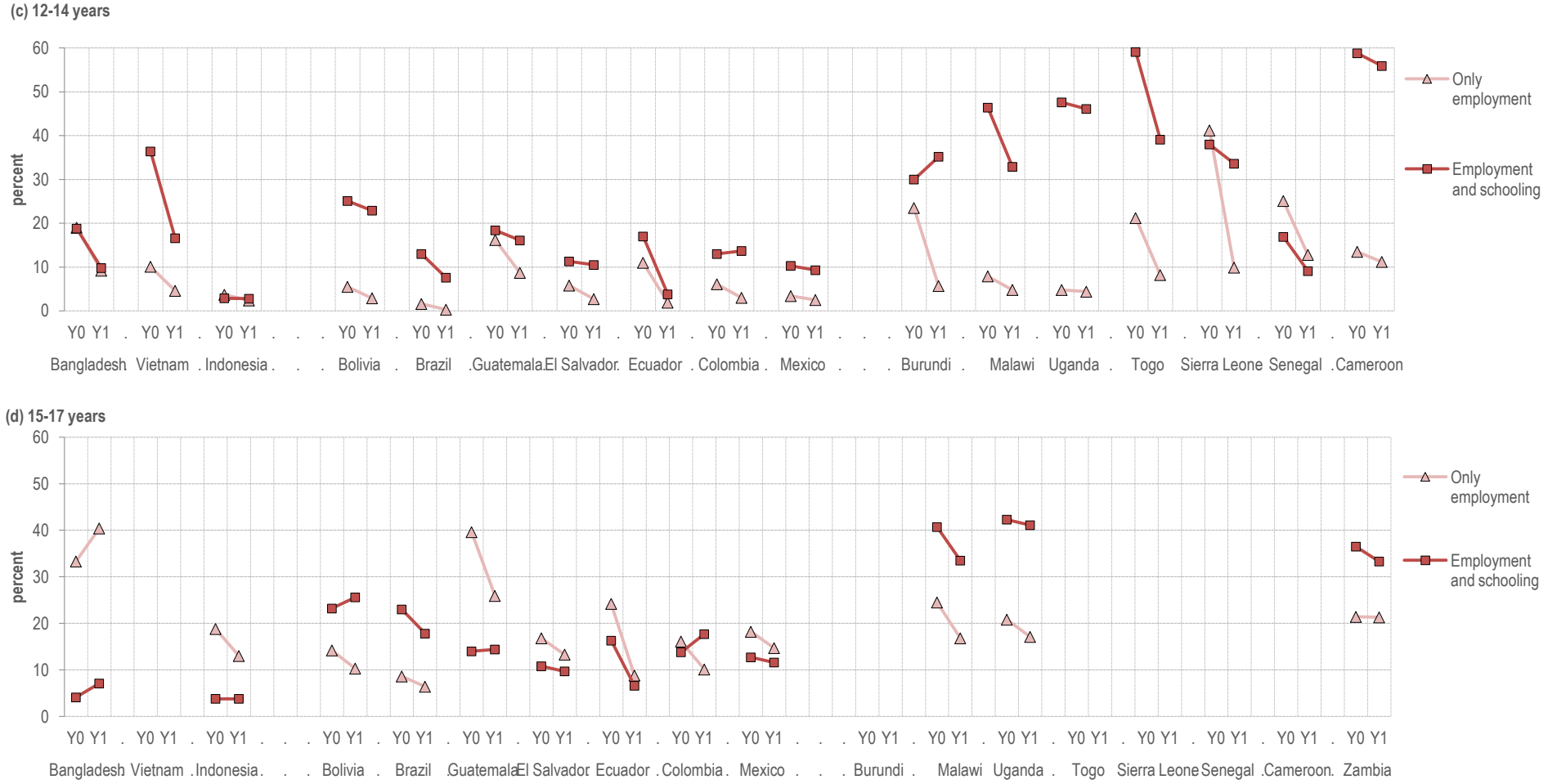


Figure 2. **Cont'd**



Notes: (a) Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country; (b) Figures for Burundi, Togo, Sierra Leone, Senegal and Cameroon refer to the 7-14 years age range.
Source: UCW calculations based on national household surveys (see Table 1).

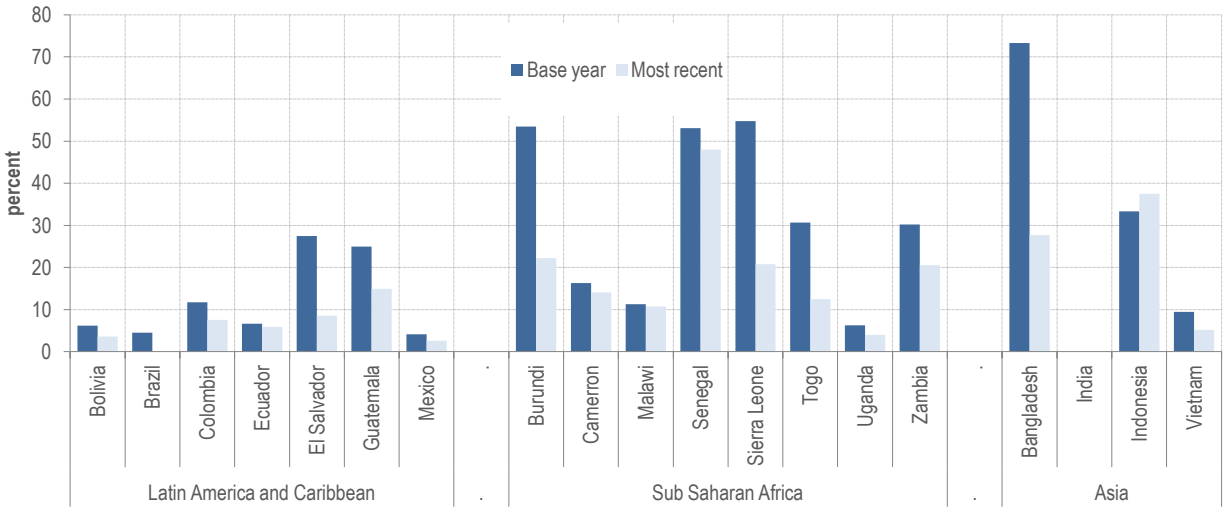
13. The population of children in employment can be divided into two broad groups, those combining employment and school and those only in employment. The overall decline in children's employment presented above masks very different patterns for these two groups. We can see from Figure 2that for the 7-17 years age group as a whole there has been a consistent and often substantial decline in the percentage of children *only* in employment across the 19 countries. Children's employment that completely precludes schooling, in other words, appears to be becoming rarer over time.

14. The trend for the group of children in the 7-17 years age group *combining employment and schooling*, however, is less consistent. While the majority of the 19 countries have also seen a decline in the share of children who are in this group, there are a number of noteworthy exceptions to this trend. In Bolivia, Colombia and Burundi, the overall decline in children's employment masks an actual *rise* in the share of children combining school and employment. In populous Bangladesh and Indonesia, the overall decline in children's involvement in employment is accounted for entirely by children only in employment; the share of all children who combine employment and schooling in the two countries remained virtually unchanged between the base and most recent years.

15. A similar picture emerges when we look at the narrower 7-11 and 12-14 years age ranges. The overall rise in employment among 7-11 year-olds in Bangladesh and the marginal overall rise in Bolivia were driven entirely by rises in the percentage of children combining employment and schooling; the percentage of children only in employment actually fell in both countries. The overall decline in employment among 7-11 year-olds and 12-14 year-olds in Burundi, and among 12-14 year-olds in Colombia, masked a rise in the percentage of children combining employment and schooling.

Figure 3 **Children who are excluded from schooling are diminishing as a share of total children in employment**

Children only in employment as a percentage of total children in employment, 7-11 years age group, base year and most recent year, by country[(a)]



Notes: (a) Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country.
Source: UCW calculations based on national household surveys (see Table 1).

16. The net effect of these changes is that the remaining population of children in employment is increasingly made up of children who combine employment and schooling. In the context of the overall decline in children's employment, in

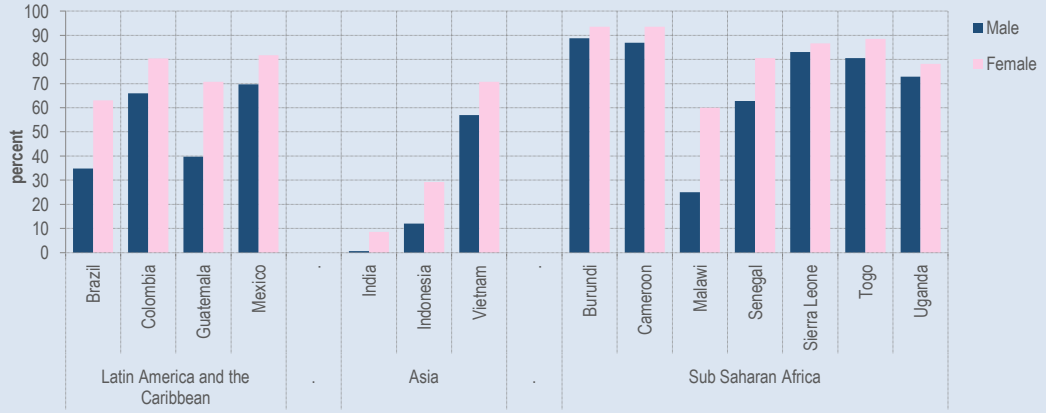
other words, there has also been a change in the interplay between employment and schooling – a greater share of children in employment also go to school and a smaller share is excluded from schooling. This point is illustrated in Figure 3, which reports children only in employment as a share of total children in employment for the 7-11 years age group. The figure indicates that the share children in employment who are *only* in employment has fallen in all of the sample countries except Indonesia.

Panel 2. **Household chores and schooling**

Employment is not the only category of work involving children. As reported in Figure A, an even larger proportion of children are engaged in a regular basis in performing household chores in their own homes in most of the Report countries where data on chores is available. This is especially the case for female children, who are more likely than their male peers to be assigned responsibility for household chores across all of the countries. Household chores include activities such as cleaning, cooking, washing clothes and dishes, child care and shopping. They fall outside the technical definition of employment and therefore are not considered in the estimates in the main text of this report.

Figure A. **A large share of children in most countries also shoulder responsibility for household chores within their own homes**

Percentage of children performing household chores in their own homes, 7-17 years age range, most recent year, by sex and country



Source: UCW calculations based on national household surveys (see Table 1).

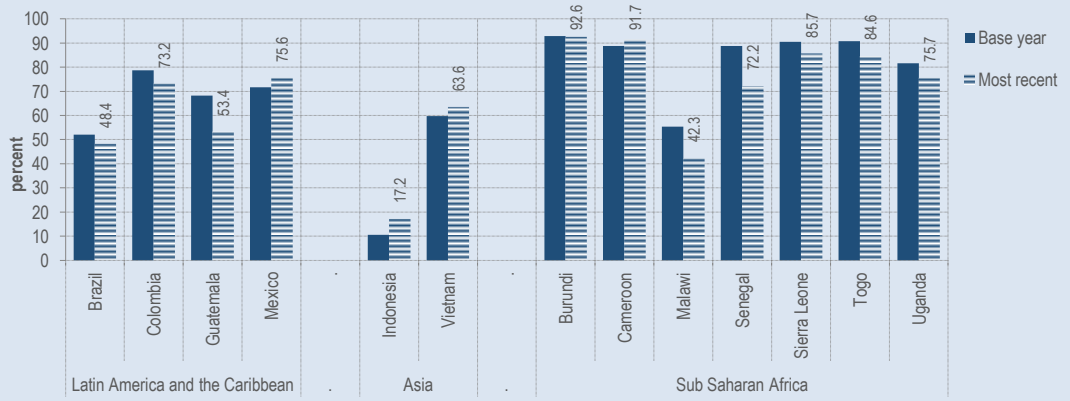
The performance of chores frequently overlaps with school attendance in the sample countries. In other words, a large share of students must undertake chores each day alongside their studies. As reported in Figure B, the percentage of students also performing chores exceeds 50 percent in all but three of the 13 countries where data are available. The percentage is especially high in the Sub Saharan African countries. In Burundi and Cameroon, for example, over 90 percent of students also perform household chores on a regular basis.

As also reported in Figure B, however, the share of students also performing household chores appears to be declining in most of the Report countries. This share has fallen in eight of the 13 countries, while in only three is there a clear trend in the opposite direction.

Panel 2.**Cont'd**

Figure B. **The share of students who also perform household chores is substantial but appears to be declining over time**

Percentage of children attending school who also perform household chores in their own homes, 7-17 years age range, base and most recent year, by country

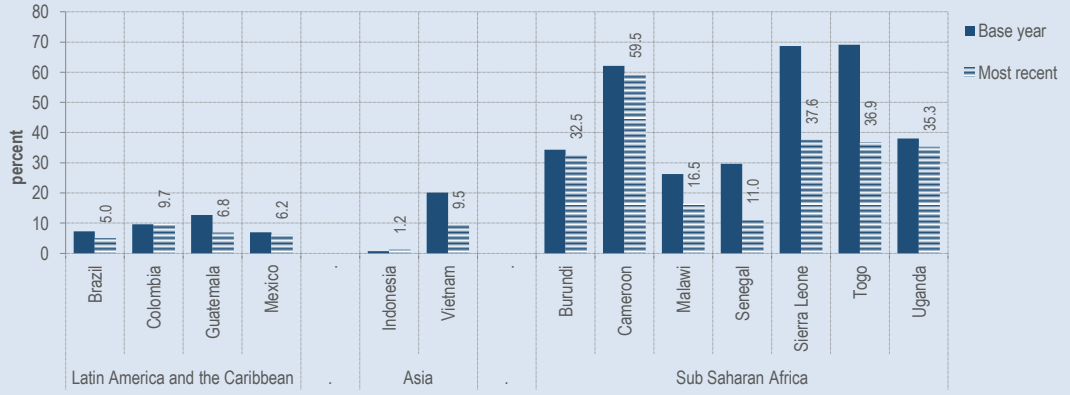


Source: UCW calculations based on national household surveys (see Table 1).

A smaller but nonetheless substantial share of students must perform both household chores *and employment*, i.e., "triple duty", with obvious consequences for the time and energy they have for their studies and for leisure. Again, this appears to be an especially important issue in Sub Saharan Africa. As reported in Figure C, at least one-third of all students are also involved in both household chores and employment in Burundi, Cameroon, Sierra Leone, Togo and Uganda. The share of triple-duty students, however, appears to be declining in most countries, as also reported in Figure C.

Figure C. **A smaller but nonetheless substantial share of students must perform both household chores and employment**

Percentage of children attending school who are also in employment and performing household chores, Share of children carrying out triple duties (work, school and household chores) over total children in school, by year, 7-17 years age range, base and most recent year, by country



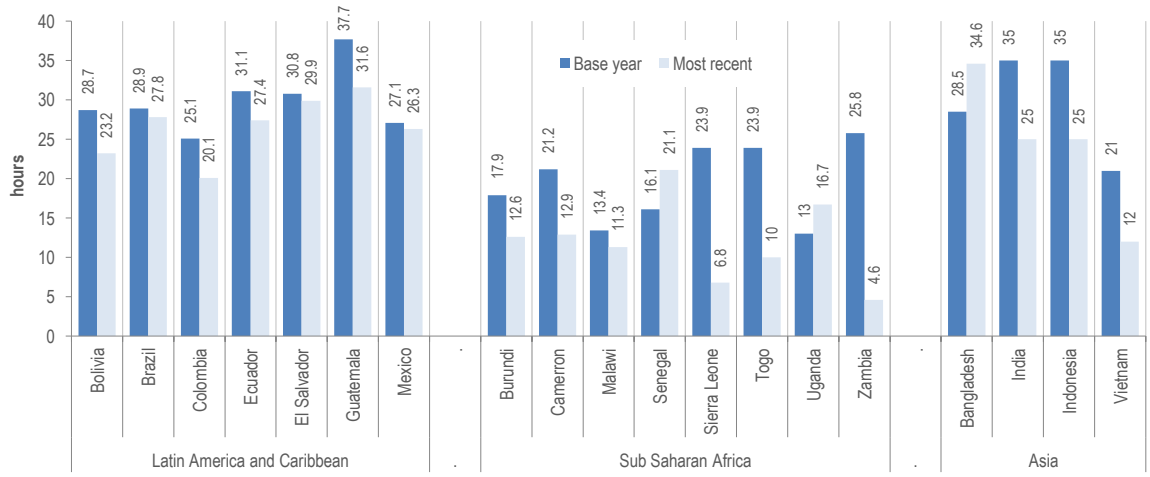
Source: UCW calculations based on national household surveys (see Table 1).

4. TRENDS IN THE TIME INTENSITY OF CHILDREN'S EMPLOYMENT

17. The decline in the incidence of children's employment has been accompanied by a reduction in the time intensity of employment in most countries. In other words, not only is a smaller share of children working in the 19 countries, but those still working are spending less time each week on average actually doing so. As reported in Figure 4, in many countries the fall in working hours has been dramatic – in Zambia, for example, against a backdrop of a 10 percentage point fall in the proportion of children in employment for the 7-17 years age group, there was a 21 hours fall in the weekly working hours of the children remaining in employment. There are on the other hand only a few exceptions where the time intensity of children's employment has increased – Bangladesh (among 12-14 and 15-17 year-olds), Senegal (7-11 year-olds and 12-14 year-olds), Uganda (15-17 year-olds) and Zambia (7-11, 12-14 and 15-17 year-olds) (Appendix Figure A2).

Figure 4 **The decline in the incidence of children's employment has been accompanied by a reduction in the time intensity of employment in most countries**

Average weekly working hours in employment, base year and most recent year, 7-17 years age range, by country[a]



Notes: (a) Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country.

Source: UCW calculations based on national household surveys (see Table 1).

18. It is again interesting to look at differences between children only in employment and children combining employment and schooling underlying these general trends. These differences are reported in Figure 5. A first point worth noting in this regard is that children only in employment log far more working hours than their counterparts attending school in all locations in both the base and most recent years. Nonetheless, children combining employment and schooling log enough hours in most countries to significantly constrain the time and energy that they have for their studies (the impact of work on school performance is discussed in Section 6 of this report).

19. As also reported in Figure 5, most countries have seen a fall in the average weekly working hours of both children only in employment and children

combining employment and schooling. There are, however, some notable exceptions to this general pattern. In the countries where there has been a rise in the time intensity of children's employment, i.e., in Bangladesh, Senegal and Uganda for the overall 7-17 years age group, this rise has been driven by sharp increases in the working hours of the group of children only in employment. The working hours of children combining employment and schooling have either decreased (Bangladesh) or increased only marginally (Senegal and Uganda).

Figure 5 **Changes in the time intensity of children's differ between children combining employment and schooling and children only in employment**

Average weekly working hours in employment, base year and most recent year, children only in employment and children combining employment and schooling, by age range and country[(a)(b)]

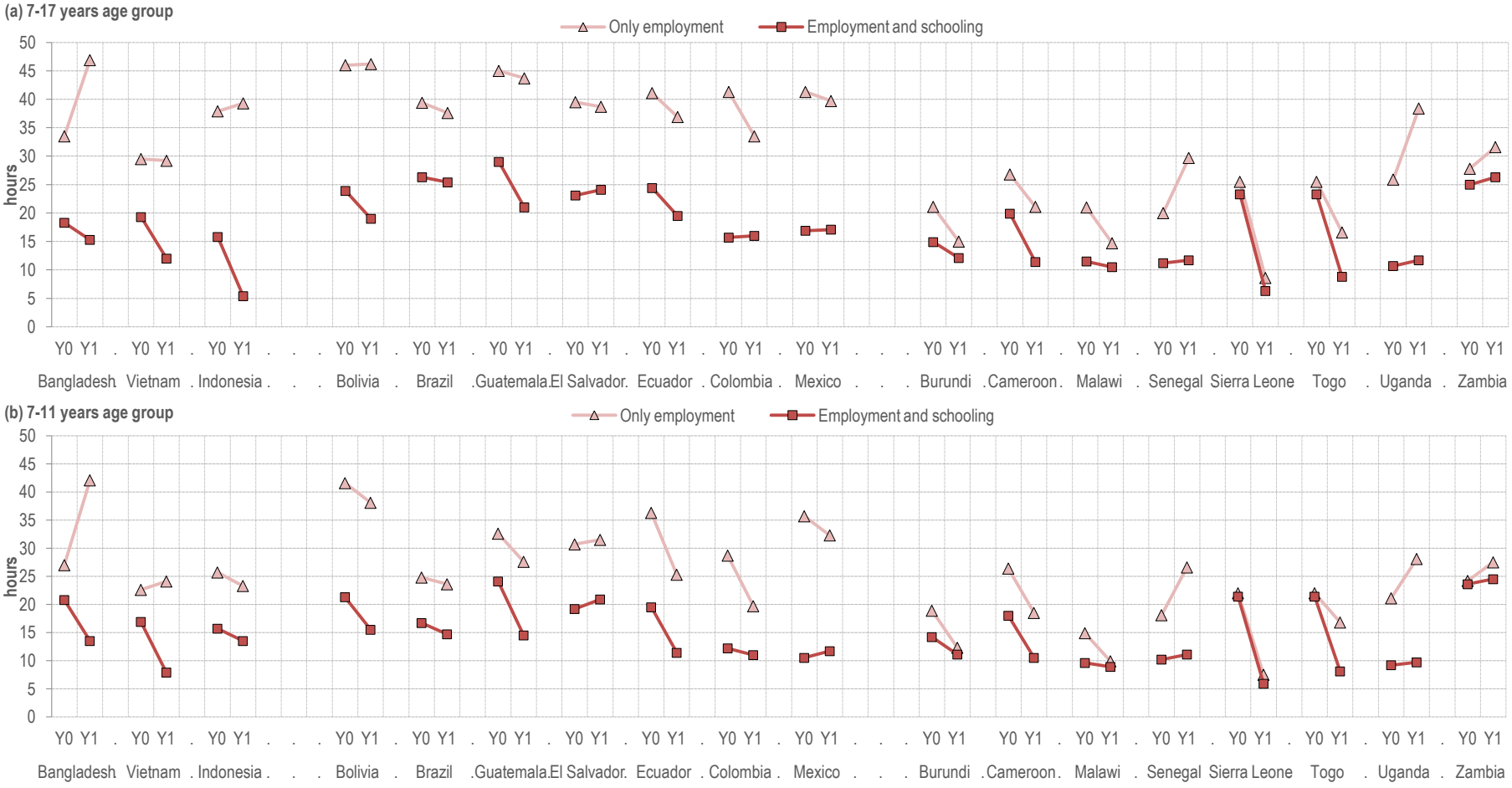
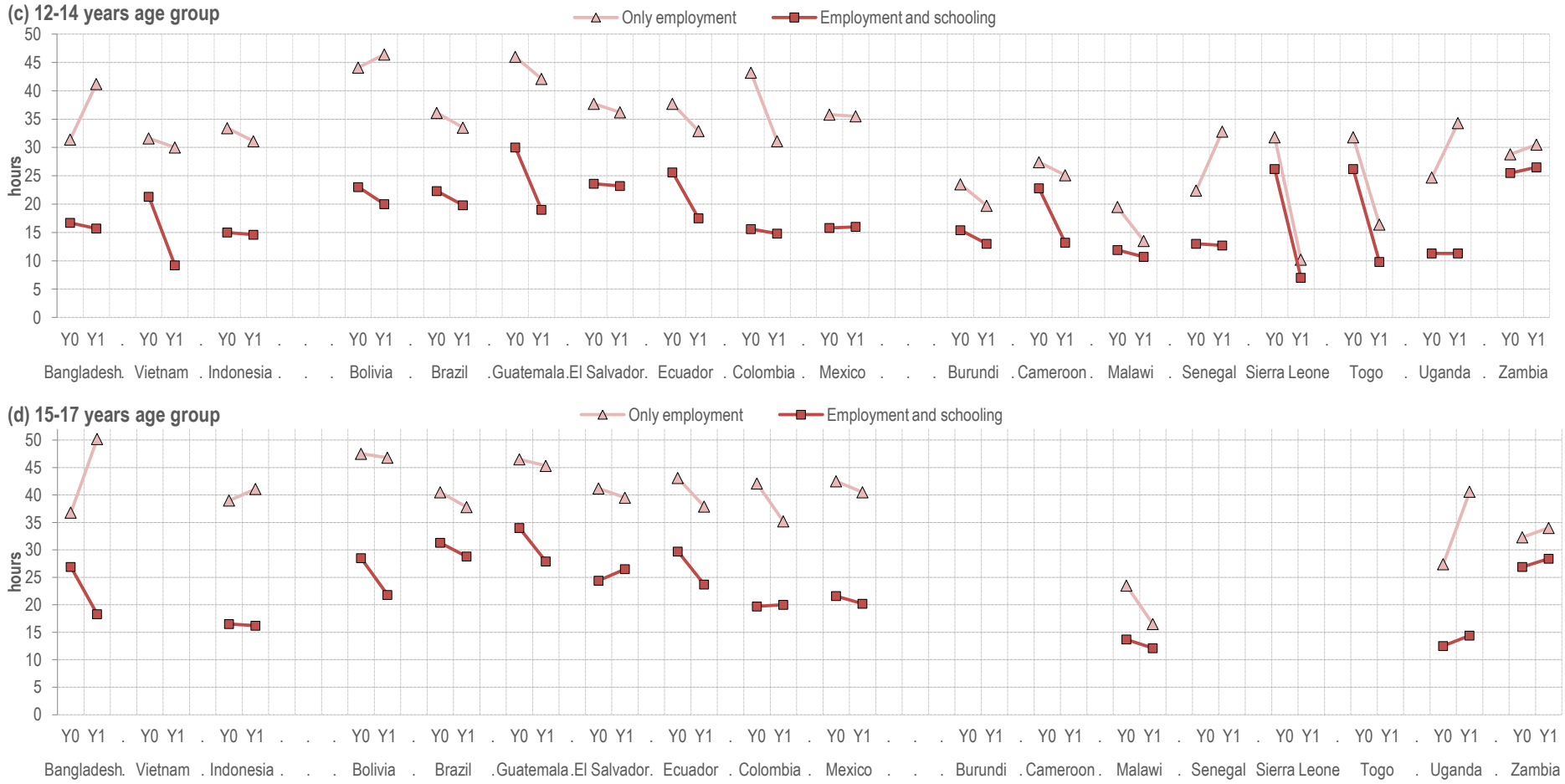


Figure 5 **Cont'd**



Notes: (a) Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country. (b) In Uganda, the calculation of working hours does not include those in subsistence agriculture

Source: UCW calculations based on national household surveys (see Table 1).

5. TRENDS IN THE STATUS OF CHILDREN'S EMPLOYMENT

20. We have looked thus far at the prevalence and time intensity of children's employment. We now turn to the composition of children's employment, how it is changing over time and differences in this regard between children only in employment and children combining employment and schooling.

21. Figure 6 reports the status in employment of children only in employment and children combining employment and schooling for the most recent year. The figure suggests important differences in terms of the work arrangements of the two groups: those combining employment and schooling are much more likely to be working for their own families while those only in employment are relatively more likely to be in paid work, and, to a lesser extent, in self-employment. These patterns are especially pronounced in the countries of the LAC and Asian regions as well as in Uganda and Zambia.

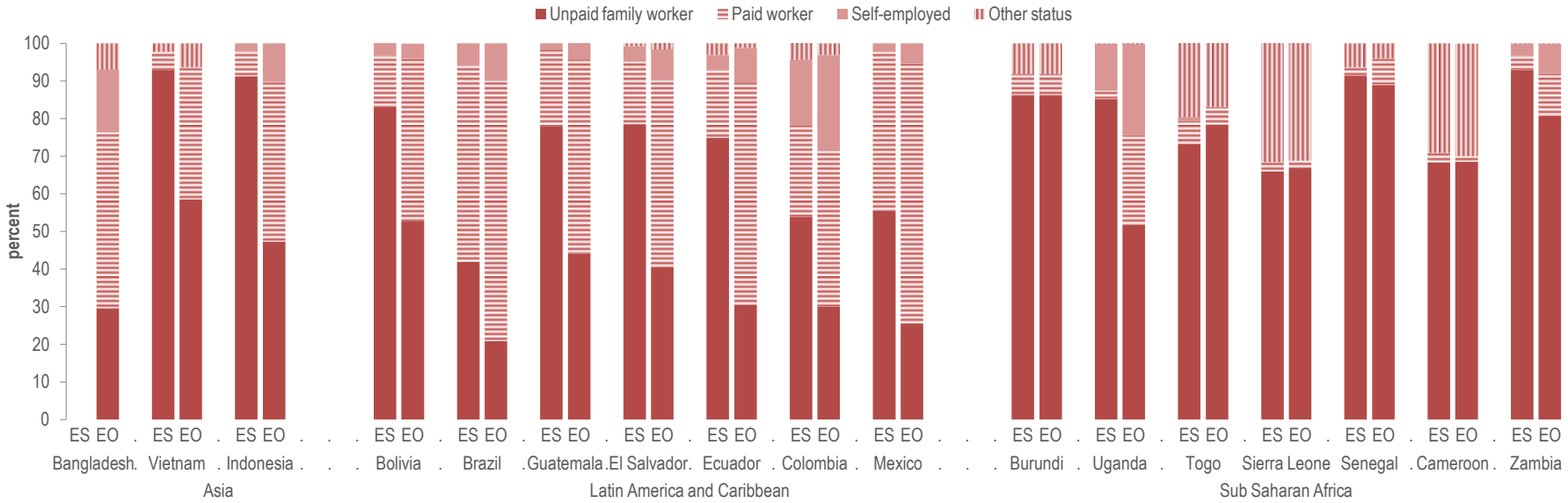
22. The differences in this regard between those only in employment and those combining employment and schooling appear to be growing over time. As reported in Figure 7, in 13 of the 17 countries, the group only in employment has seen a reduction in the relative importance of unpaid family work and a corresponding increase in the relative importance of work outside the family and in particular in the relative importance of paid work. It should be recalled that these changes in work arrangements occurred against the backdrop of a consistent cross-country decline in the prevalence of children only in employment. As the share children only in employment has declined, in other words, this group has become increasingly concentrated in work outside the family.

23. At the same time, the changes in the work arrangement of children combining employment and schooling have been smaller and less consistent across the 19 countries. The relative importance of unpaid family work increased in nine countries but the pattern operated in the opposite direction in the seven other countries.

24. Information on children's sector of employment, available for fewer of the Report countries, also points to differences between children only in employment and children combining employment and schooling (Appendix Figure A4). Those combining employment and schooling are more likely to be found in agriculture while those only in employment are more likely to be found in non-agricultural sectors (Colombia and Mexico are exceptions). There are no clear patterns in terms of how the sectoral composition of employment is changing for over time for the two groups of children in employment (Appendix Figure A5).

Figure 6 **There are important differences between children only in employment and children combining employment and schooling in terms of work setting and work modalities**

Children's status in employment (% distribution), children in employment only and children combining employment and school, most recent year, by country[(a)]

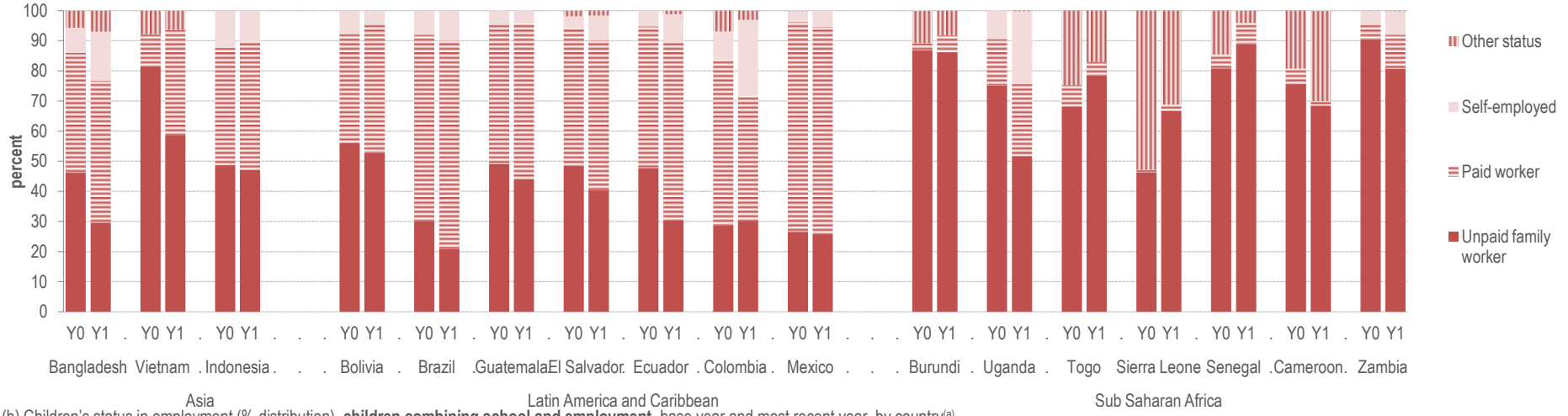


Notes: (a) Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country. The category "Unpaid family work" for estimates based on MICS surveys includes also "unpaid work carried out for non-family members"

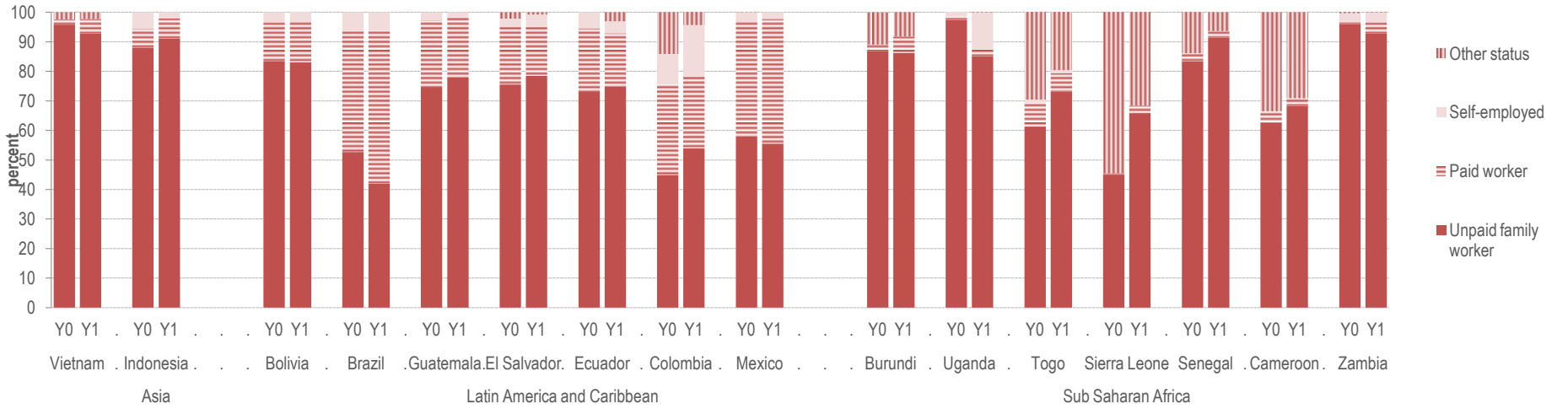
Source: UCW calculations based on national household surveys (see Table 1).

Figure 7 **The differences in work arrangements between children only in employment and children combining employment and schooling appear to be growing over time**

(a) Children's status in employment (% distribution), **children in employment only**, base year and most recent year, by country[a]



(b) Children's status in employment (% distribution), **children combining school and employment**, base year and most recent year, by country[a]



Notes: Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country. The category "Unpaid family work" for estimates based on MICS surveys includes also "unpaid work carried out for non-family members"

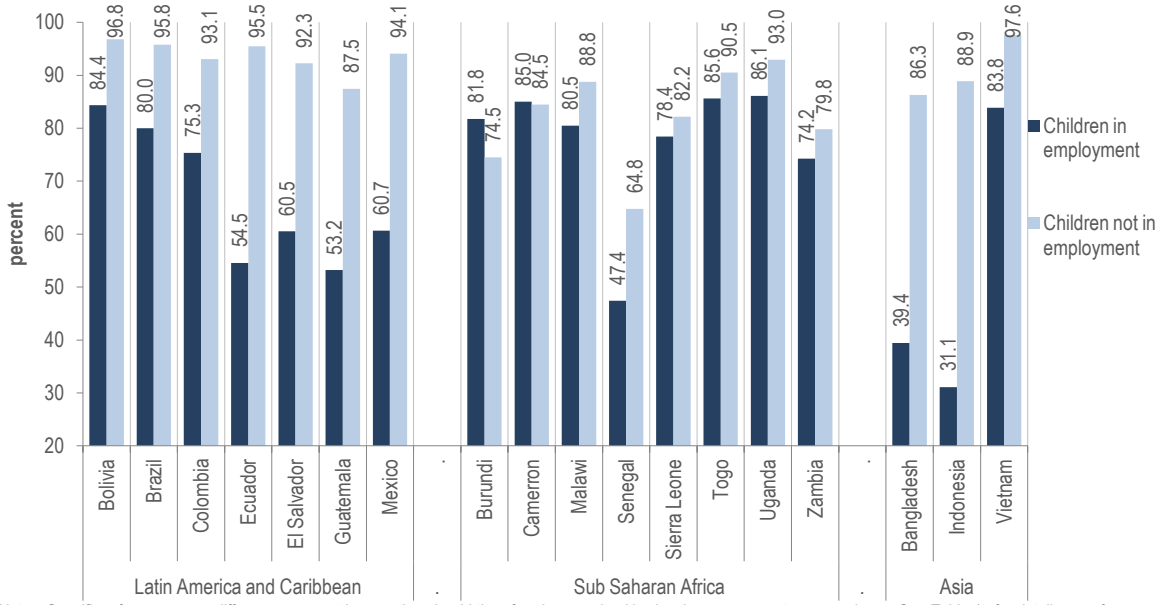
Source: UCW calculations based on national household surveys (see Table 1).

6. RELATION BETWEEN GRADE-FOR-AGE AND CHILDREN'S WORK

25. Children are clearly disadvantaged in terms of being able to attend school. As reported in Figure 8, the school attendance rate of working children is lower than of their non-working peers in all 19 countries. Differences in this regard are often very pronounced – in populous Bangladesh and Indonesia, for example, non-working children are more than twice as likely to be in school as those who must also shoulder the burden of work.

Figure 8 **School attendance is consistently much lower for children in employment than for their non-working peers**

Percentage of children attending school, 7-17 years age group, most recent year, by employment status and country[a]



Notes: Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country.

Source: UCW calculations based on national household surveys (see Table 1).

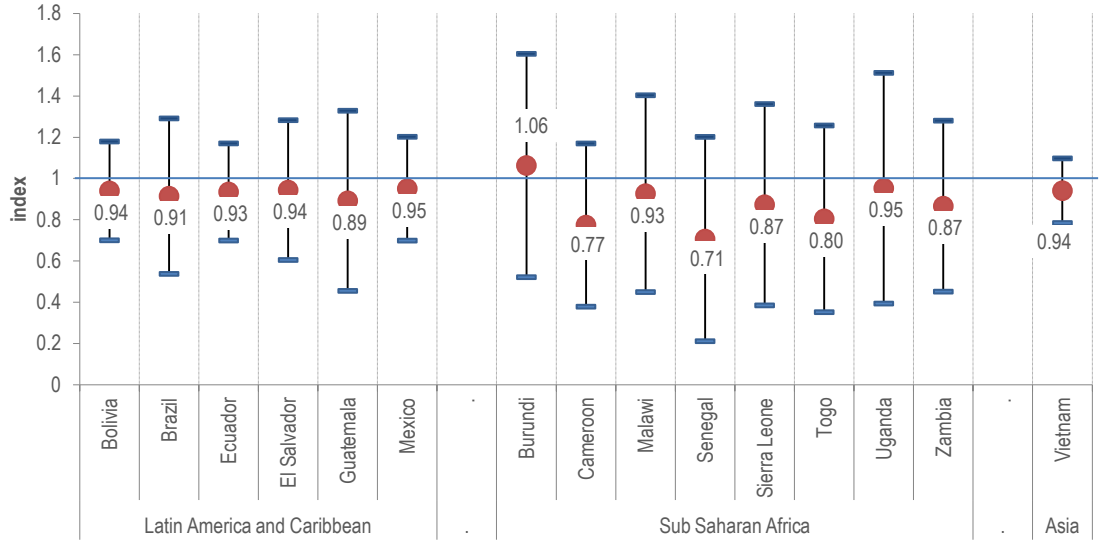
26. Nonetheless, as Figure 8 also shows, there are more working children in school than out of it in almost all of the 19 countries (more than half of working children are in school in all but Senegal, Bangladesh and Indonesia). This raises another important question relating to the educational impact of work: the extent to which work interferes with the ability of children to learn effectively once in the classroom. It stands to reason that the exigencies of work limit the time and energy children have for their studies, in turn negatively impacting upon their academic performance. But in the absence of test scores or some other direct measure of achievement, information that is unfortunately not available from the datasets we are using for this Report, it is difficult to draw concrete conclusions regarding the link between school performance and children's employment.

27. Average grade-for-age, reported in Figure 9, offers one indirect measure of school performance. The figure indicates the children combining employment and schooling lag substantially behind their non-working peers in terms of grade progression at the age of 13 years in all but one of our sample countries. The lag in grade progression is likely in large part due to repetition arising from poorer

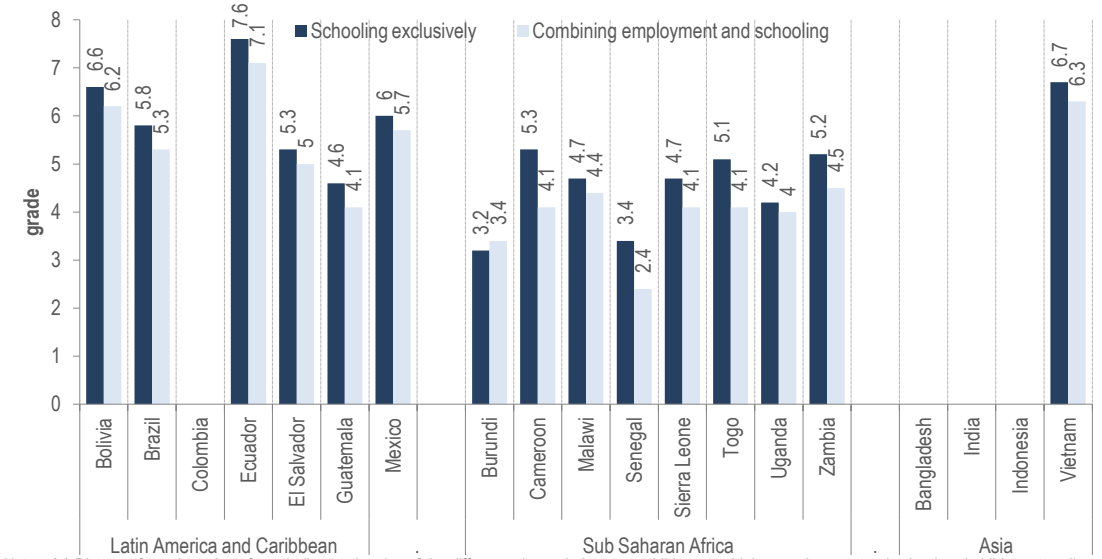
performance, although other reasons of course cannot be ruled out.[4] What is more, because children in employment are more likely to drop out at early ages, and because drop outs are presumably those with higher accumulated delay, the gap in Figure 9 is likely to underestimate the true gap in grade-for-age, i.e., the gap that would be observed in the absence of selective drop out. These results point to the difficulty that working children face in keeping up in the classroom with children that are not burdened with work responsibilities, and constitute another indication of the educational cost associated with children's employment.

Figure 9 **Children in employment also lag behind in terms of grade for age**

(a) Average grade at age of 13 years of children combining employment and school expressed as a percentage of average grade for age at 13 years of children who are in school exclusively,[(a)(b)] 7-14 years age group, most recent year, by employment status and country[(c)]



(b) Average grade at age of 13 years, most recent year, by employment status and country[(b)]



Notes: (a) Distance from the value of one indicates the size of the difference in grade between children combining employment and school and children attending school only. Values greater than one indicate that children combining employment and school have higher average grade at age of 13 years while values of less than one indicate that children combining employment and school have lower average grade at the age of 13 years. (b) The upper and lower bars show the standard deviation from the ratio. (c) Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country.
Source: UCW calculations based on national household surveys (see Table 1).

[4] The lag in grade progression might also, for example, be due to higher incidence of late entry among children who are identified as workers, or to higher absenteeism among child labourers in turn leading to grade repetition.

STATISTICAL APPENDIX

Figure A1. **The general decline in children's employment has been accompanied by a general rise in school attendance**

Percentage of children in attending school, base year and most recent year, by age range and country[a]

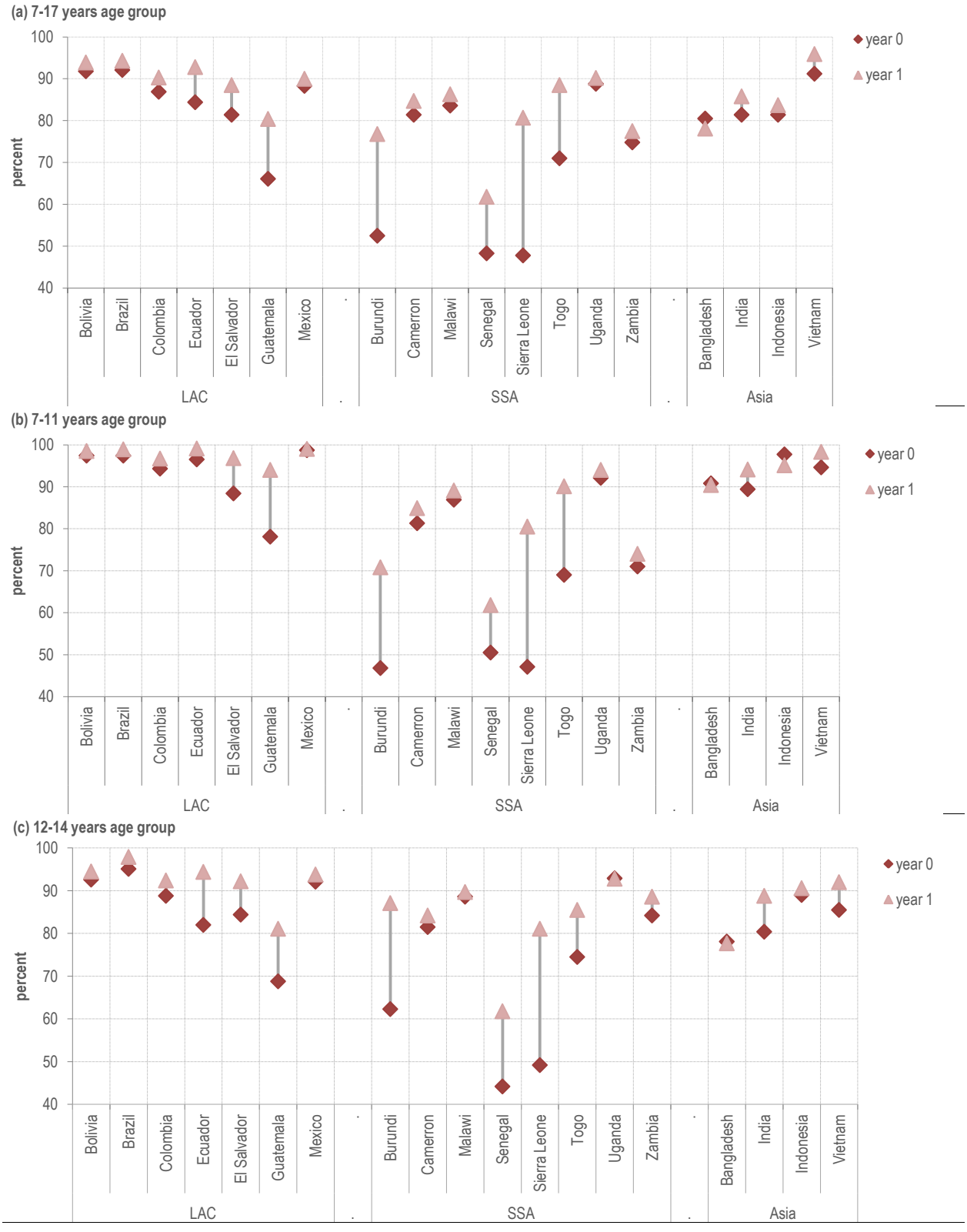
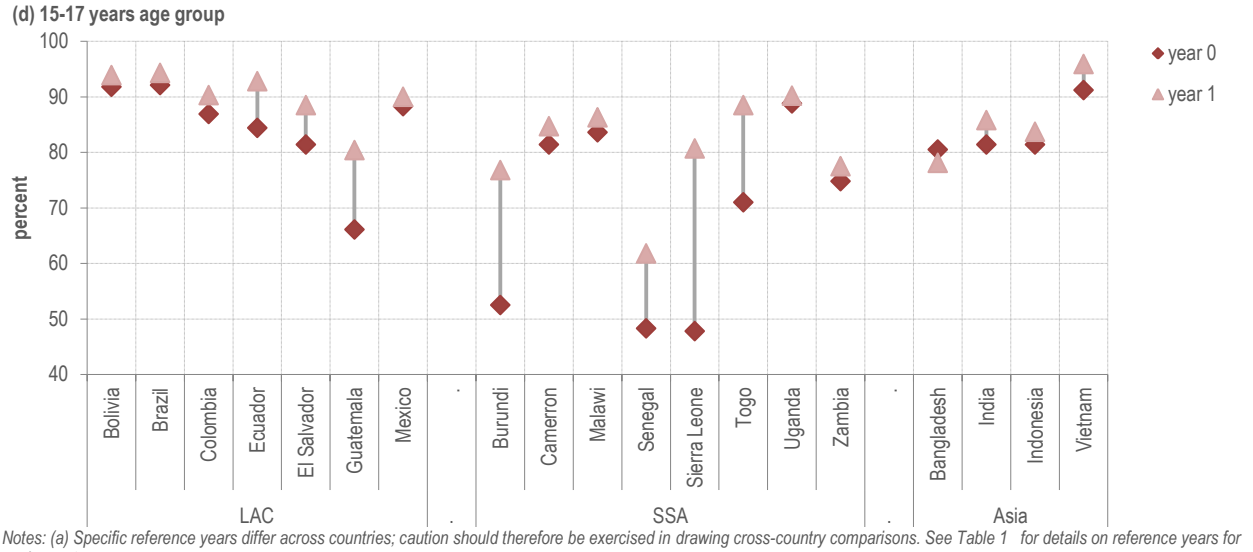


Figure A1. **The general decline in children's employment has been accompanied by a general rise in school attendance**

Percentage of children in attending school, base year and most recent year, by age range and country[a]

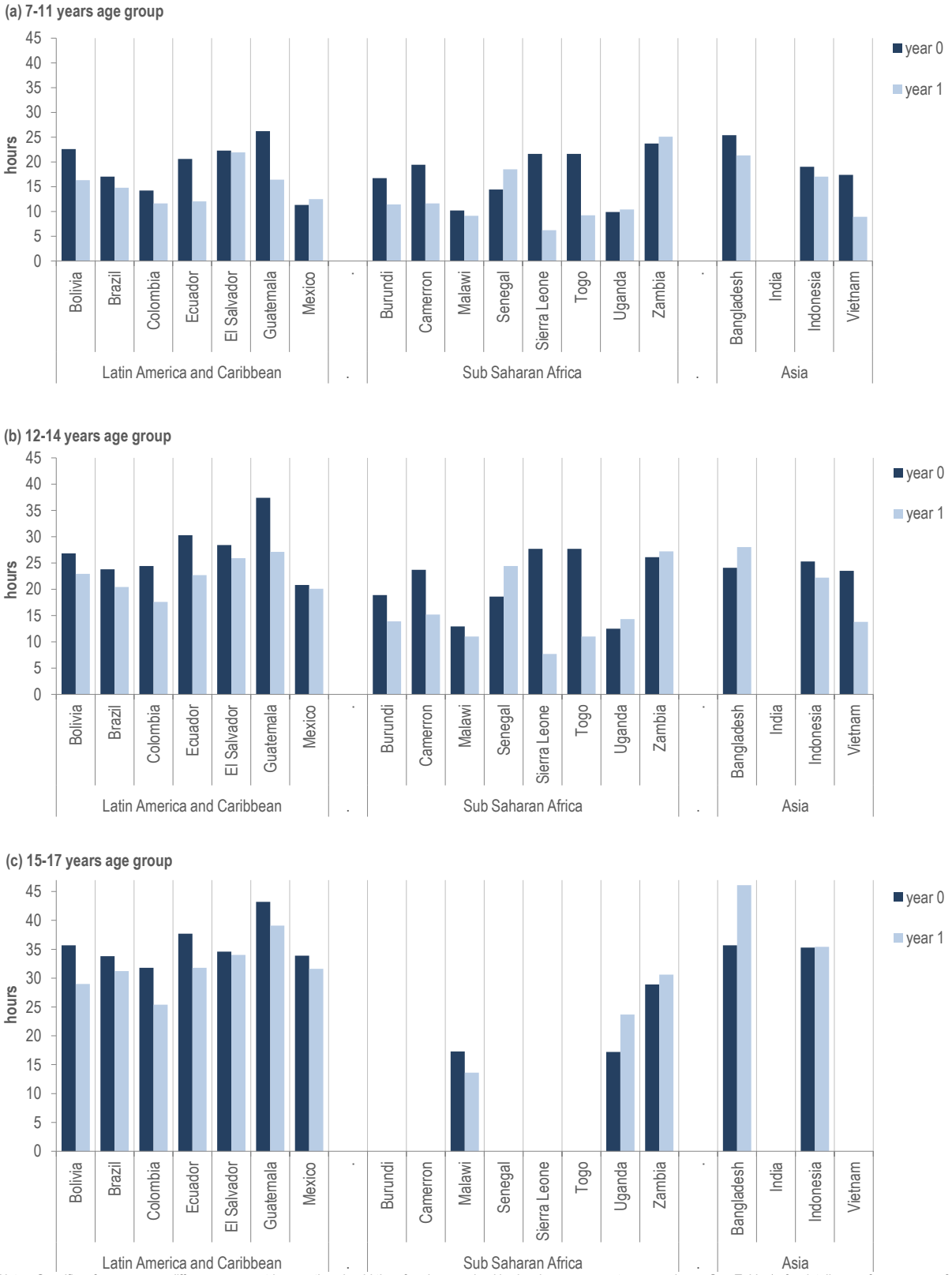


Notes: (a) Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country.

Source: UCW calculations based on national household surveys (see Table 1).

Figure A2. **The decline in the incidence of children's employment has been accompanied by a reduction in the time intensity of employment in most countries**

Average weekly working hours in employment, base year and most recent year, by age range and country[a]



Notes: Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country.

Source: UCW calculations based on national household surveys (see Table 1).

Table A1. **Changes in the percentage of children combining employment and schooling and of children only in employment, base year and most recent year, by country[a] sex, residence and age range**

Country	Year	Total			Sex						Residence						Age range								
					Male			Female			Urban			Rural			7-11			12-14			15-17		
		E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]
Bolivia	Y0	25.2	5.4	19.8	27.1	4.9	22.2	23.4	5.9	17.5	12.6	3.0	9.6	44.3	9.1	35.3	16.1	1.0	15.1	30.6	5.5	25.1	37.4	14.2	23.2
	Y1	24.3	3.8	20.5	26.5	3.4	23.2	22.0	4.2	17.8	13.5	2.1	11.3	42.8	6.6	36.2	16.7	0.6	16.1	25.8	2.9	22.9	35.9	10.3	25.6
Brazil	Y0	14.9	2.9	12.0	19.2	3.8	15.5	10.5	2.1	8.4	10.8	2.2	8.6	33.0	6.2	26.8	4.4	0.2	4.3	14.5	1.6	13.0	31.5	8.6	23.0
	Y1	9.9	2.0	8.0	13.0	2.7	10.3	6.8	1.2	5.6	7.6	1.7	6.0	20.1	3.2	16.9	1.7	0.0	1.7	7.9	0.3	7.6	24.2	6.4	17.8
Colombia	Y0	16.5	6.0	10.5	22.5	8.8	13.7	10.1	3.0	7.1	-	-	-	-	-	-	8.5	1.0	7.5	19.0	6.1	13.0	29.9	16.1	13.8
	Y1	15.1	3.7	11.3	19.4	5.4	14.0	10.3	1.9	8.4	12.4	2.7	9.7	22.2	6.4	15.8	6.6	0.5	6.2	16.7	3.0	13.7	27.8	10.1	17.7
Ecuador	Y0	23.5	9.4	14.1	28.8	11.4	17.4	18.1	7.3	10.8	13.3	4.8	8.5	39.2	16.4	22.8	12.1	0.8	11.3	28.0	11.0	17.0	40.5	24.2	16.3
	Y1	6.6	3.0	3.6	8.7	4.2	4.5	4.4	1.8	2.6	3.7	1.8	1.9	11.5	5.0	6.5	1.7	0.1	1.6	5.7	1.9	3.8	15.3	8.8	6.6
El Salvador	Y0	13.6	6.4	7.2	18.8	9.0	9.8	8.3	3.8	4.6	9.1	3.3	5.8	18.6	9.8	8.8	4.0	1.1	2.9	17.1	5.8	11.3	27.6	16.8	10.8
	Y1	11.9	4.7	7.2	16.2	6.6	9.6	7.3	2.7	4.6	8.0	3.2	4.8	17.0	6.7	10.3	3.5	0.3	3.1	13.1	2.7	10.5	23.0	13.3	9.7
Guatemala	Y0	28.0	15.3	12.7	36.2	19.3	16.9	19.4	11.0	8.4	21.2	9.9	11.2	31.7	18.2	13.5	12.0	3.0	9.0	34.5	16.2	18.4	53.6	39.6	14.0
	Y1	20.3	9.5	10.8	27.4	12.4	15.1	13.0	6.6	6.4	16.1	6.5	9.6	23.6	11.8	11.8	6.7	1.0	5.8	24.8	8.7	16.1	40.3	25.9	14.4
Mexico	Y0	14.5	6.1	8.5	19.2	8.5	10.7	9.7	3.6	6.1	10.0	4.0	6.0	18.2	7.8	10.5	4.8	0.2	4.7	13.7	3.4	10.3	30.9	18.2	12.7
	Y1	12.2	4.8	7.4	16.4	6.9	9.5	7.9	2.7	5.2	8.5	3.1	5.4	15.0	6.1	8.9	3.8	0.1	3.7	11.8	2.5	9.3	26.3	14.7	11.6
Burundi	Y0	37.0	17.9	19.1	38.4	17.1	21.3	35.7	18.5	17.2	18.3	7.5	10.6	38.3	18.6	19.7	27.3	14.6	12.7	53.5	23.5	30.0	-	-	-
	Y1	31.9	5.8	26.0	31.3	5.7	25.7	32.4	6.0	26.4	17.9	2.7	15.3	33.1	6.1	27.0	26.5	5.9	20.6	40.9	5.7	35.2	-	-	-
Cameroon	Y0	65.4	11.3	54.1	67.6	10.3	57.3	63.1	12.3	50.7	53.1	4.4	48.8	71.5	14.7	56.7	61.4	10.0	51.3	72.4	13.5	58.8	-	-	-
	Y1	62.0	9.3	52.7	63.6	7.8	55.8	60.4	10.8	49.6	47.8	3.1	44.8	73.3	14.3	59.0	59.5	8.4	51.2	67.2	11.2	55.9	-	-	-
Malawi	Y0	41.5	8.9	34.0	44.1	8.5	37.2	38.9	9.4	30.9	9.2	3.2	6.5	45.6	9.7	37.5	27.4	3.1	25.1	52.2	7.9	46.4	62.3	24.5	40.7
	Y1	30.5	6.0	24.7	31.7	5.9	26.0	29.3	6.1	23.4	12.2	2.9	9.6	33.5	6.5	27.2	18.6	2.0	16.7	37.5	4.8	32.9	49.8	16.8	33.5
Senegal	Y0	36.9	20.6	16.3	44.9	24.0	20.9	28.9	17.1	11.8	27.7	11.2	16.7	42.4	26.3	16.1	34.3	18.2	16.1	41.7	25.1	16.9	-	-	-
	Y1	17.4	9.2	8.3	20.9	11.6	9.2	14.1	6.7	7.3	10.2	4.0	6.2	22.0	12.5	9.6	15.0	7.2	7.8	21.9	12.8	9.1	-	-	-
Sierra Leone	Y0	74.0	39.8	34.3	75.2	38.6	36.8	72.7	41.1	31.8	68.1	21.8	46.3	76.4	47.3	29.4	71.6	39.2	32.6	79.0	41.2	38.0	-	-	-
	Y1	39.9	8.6	31.3	40.8	9.0	31.8	39.1	8.3	30.9	29.1	5.1	24.1	44.5	10.1	34.4	38.0	7.9	30.1	43.5	9.9	33.6	-	-	-
Togo	Y0	72.5	21.0	51.5	73.4	17.1	56.3	71.6	25.0	46.6	57.6	11.0	46.7	79.2	25.5	53.7	68.2	20.9	47.4	80.3	21.2	59.1	-	-	-
	Y1	41.0	5.9	35.1	41.7	4.9	36.8	40.3	7.0	33.3	25.8	2.1	23.7	47.9	7.7	40.3	37.7	4.7	33.0	47.3	8.2	39.1	-	-	-
Uganda	Y0	43.4	6.7	36.8	44.9	6.8	38.2	41.8	6.6	35.3	20.3	5.9	14.4	47.1	6.8	40.4	30.4	1.9	28.5	52.4	4.8	47.6	63.0	20.8	42.3
	Y1	41.6	5.8	35.9	42.7	6.4	36.5	40.6	5.3	35.3	18.2	5.2	13.2	45.3	5.9	39.4	27.6	1.1	26.6	50.4	4.4	46.1	58.3	17.1	41.1
Zambia	Y0	50.2	14.5	35.8	51.1	14.1	37.1	49.3	15.0	34.3	14.5	3.9	10.6	69.2	20.2	49.1	44.4	13.4	31.0	54.2	10.7	43.7	57.8	21.4	36.5
	Y1	39.5	10.2	29.4	40.7	10.3	30.5	38.3	10.2	28.2	19.5	4.4	15.2	50.2	13.3	36.9	27.7	5.7	22.1	46.1	7.6	38.4	54.6	21.3	33.3
Bangladesh	Y0	21.1	14.2	6.9	29.0	19.3	9.8	11.9	8.3	3.6	17.8	12.8	5.0	22.0	14.6	7.5	4.5	3.3	1.2	37.7	19.0	18.8	37.3	33.3	4.1
	Y1	17.5	10.6	6.9	26.7	16.9	9.8	7.1	3.5	3.6	15.1	10.1	5.0	18.1	10.7	7.4	6.5	1.8	4.7	19.0	9.2	9.8	47.5	40.4	7.1
India	Y0	11.3	-	-	11.8	-	-	8.8	-	-	7.1	-	-	11.5	-	-	1.1	-	-	9.2	-	-	30.1	-	-
	Y1	6.6	-	-	8.1	-	-	4.9	-	-	4.2	-	-	7.4	-	-	0.9	-	-	4.9	-	-	18.4	-	-
Indonesia	Y0	11.3	8.5	2.7	13.2	9.9	3.3	9.2	7.1	2.1	7.3	5.6	1.6	14.1	10.6	3.5	1.5	0.5	1.0	6.5	3.7	2.9	22.5	18.8	3.8
	Y1	9.0	6.2	2.8	10.4	7.4	3.1	7.4	5.0	2.4	6.2	4.6	1.6	10.9	7.3	3.6	1.6	0.6	1.1	5.2	2.4	2.8	16.8	13.0	3.8
Vietnam	Y0	29.2	4.9	24.3	30.1	4.2	26.0	28.2	5.6	22.6	10.3	1.7	8.5	33.3	5.6	27.7	19.0	1.8	17.2	46.5	10.1	36.4	-	-	-
	Y1	13.0	2.1	10.9	12.5	1.9	10.7	13.5	2.3	11.2	7.2	1.0	6.2	15.0	2.4	12.5	7.7	0.4	7.3	21.2	4.6	16.6	-	-	-

Notes: (a) Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country; (b) "E" denotes overall involvement in employment regardless of schooling status (c) "EO" denotes employment only; and (d) "ES" denotes employment and schooling.

Source: UCW calculations based on national household surveys (see Table 1).

Table A2. **Changes in average weekly working hours in employment, children only in employment and children combining employment and schooling, base year and most recent year, by country(a) sex, residence and age range**

Country	Year	Total			Sex						Residence						Age range								
					Male			Female			Urban			Rural			7-11			12-14			15-17		
		E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]	E[b]	EO[c]	ES[d]
Bolivia	Y0	28.7	46.0	23.9	27.4	45.7	23.3	30.2	46.2	24.7	32.9	51.4	27.1	26.9	43.3	22.6	22.6	41.6	21.3	26.8	44.1	23.0	35.7	47.5	28.5
	Y1	23.2	46.2	19.0	22.4	45.5	19.0	24.2	46.7	18.9	28.0	55.2	22.9	20.6	41.1	16.9	16.3	38.1	15.5	22.9	46.4	20.0	29.0	46.8	21.8
Brazil	Y0	28.9	39.4	26.3	29.1	41.0	26.2	28.5	36.5	26.5	31.6	40.7	29.3	25.0	37.5	22.1	17.0	24.8	16.7	23.8	36.1	22.3	33.8	40.5	31.3
	Y1	27.8	37.6	25.4	28.3	38.8	25.5	26.7	34.7	25.1	30.4	39.1	28.0	23.2	34.1	21.0	14.8	23.6	14.7	20.4	33.5	19.8	31.2	37.8	28.8
Colombia	Y0	25.1	41.3	15.7	25.9	41.0	16.1	23.1	42.1	14.8	-	-	-	-	-	-	14.2	28.7	12.2	24.4	43.2	15.6	31.8	42.1	19.7
	Y1	20.1	33.5	16.0	21.4	35.0	16.4	17.7	29.1	15.2	21.0	36.2	17.0	18.9	30.6	14.3	11.6	19.7	11.0	17.6	31.1	14.8	25.4	35.2	20.0
Ecuador	Y0	31.1	41.1	24.4	31.7	42.6	24.5	30.1	38.7	24.4	33.0	44.2	26.5	30.1	39.7	23.2	20.6	36.3	19.5	30.3	37.7	25.6	37.7	43.1	29.7
	Y1	27.4	36.9	19.5	28.9	38.4	20.2	24.4	33.3	18.2	31.1	39.6	22.9	25.4	35.3	17.8	12.0	25.3	11.4	22.7	32.9	17.5	31.8	37.9	23.7
El Salvador	Y0	30.8	39.5	23.1	30.3	38.9	22.4	31.8	40.8	24.4	31.6	43.7	24.6	30.3	37.9	21.9	22.3	30.7	19.2	28.4	37.7	23.6	34.6	41.2	24.4
	Y1	29.9	38.7	24.1	29.1	37.1	23.5	31.8	42.9	25.3	31.5	41.8	24.8	28.8	36.8	23.6	21.9	31.5	20.9	25.9	36.2	23.2	34.0	39.5	26.5
Guatemala	Y0	37.7	45.0	29.0	38.0	45.9	28.9	37.2	43.4	29.3	40.3	51.3	30.8	36.8	43.2	28.2	26.2	32.6	24.1	37.4	46.0	30.0	43.2	46.5	34.0
	Y1	31.6	43.7	21.0	32.0	45.4	20.9	30.8	40.3	21.0	33.1	47.2	23.6	30.8	42.2	19.3	16.4	27.6	14.5	27.1	42.1	19.0	39.1	45.3	27.9
Mexico	Y0	27.1	41.3	16.9	28.2	42.5	16.9	24.9	38.6	16.8	28.5	43.8	18.2	26.5	40.3	16.3	11.3	35.7	10.5	20.8	35.8	15.8	33.9	42.5	21.6
	Y1	26.3	39.7	17.1	27.0	40.5	16.8	24.9	37.7	17.7	26.8	41.5	17.9	26.1	39.0	16.8	12.5	32.3	11.7	20.1	35.5	16.0	31.6	40.5	20.2
Burundi	Y0	17.9	21.1	14.9	18.5	21.6	16.0	17.4	20.7	13.7	15.4	19.8	11.7	18.0	21.2	15.0	16.7	18.9	14.2	18.9	23.5	15.4	-	-	-
	Y1	12.6	15.0	12.1	12.9	14.7	12.5	12.3	15.3	11.6	11.0	14.6	10.3	12.7	15.0	12.1	11.4	12.3	11.1	13.9	19.7	13.0	-	-	-
Cameroon	Y0	21.2	26.8	19.9	21.9	28.4	20.8	20.3	25.5	19.0	16.1	22.3	15.5	22.9	27.5	21.7	19.4	26.4	18.0	23.7	27.4	22.8	-	-	-
	Y1	12.9	21.1	11.4	14.0	24.4	12.5	11.7	18.5	10.1	8.2	15.2	7.7	15.0	22.0	13.4	11.6	18.5	10.5	15.2	25.1	13.2	-	-	-
Malawi	Y0	13.4	21.0	11.5	14.0	22.3	12.1	12.7	19.8	10.7	20.3	34.2	14.1	13.2	20.5	11.4	10.2	14.9	9.6	12.9	19.5	11.9	17.3	23.5	13.7
	Y1	11.3	14.7	10.5	11.9	16.5	10.9	10.7	13.0	10.1	16.1	31.3	11.4	11.1	13.5	10.5	9.1	9.9	8.9	11.0	13.5	10.7	13.6	16.5	12.1
Senegal	Y0	16.1	20.0	11.2	19.2	24.2	13.3	11.3	13.8	7.5	11.8	17.6	8.0	17.7	20.5	13.2	14.4	18.1	10.2	18.6	22.4	13.0	-	-	-
	Y1	21.1	29.7	11.7	23.9	32.6	13.2	17.0	24.7	9.9	24.8	43.8	11.2	20.1	26.7	11.9	18.5	26.6	11.1	24.4	32.8	12.7	-	-	-
Sierra Leone	Y0	23.9	25.5	23.3	25.1	26.5	24.6	22.8	24.9	21.6	19.5	23.1	18.7	25.4	26.0	25.1	21.6	22.0	21.4	27.7	31.8	26.2	-	-	-
	Y1	6.8	8.6	6.3	6.6	7.5	6.3	7.0	9.7	6.3	6.5	8.1	6.1	6.9	8.7	6.4	6.2	7.5	5.9	7.7	10.2	7.0	-	-	-
Togo	Y0	23.9	25.5	23.3	25.1	26.5	24.6	22.8	24.9	21.6	19.5	23.1	18.7	25.4	26.0	25.1	21.6	22.0	21.4	27.7	31.8	26.2	-	-	-
	Y1	10.0	16.6	8.8	9.5	14.2	8.8	10.5	18.4	8.8	12.3	31.6	10.4	9.5	15.1	8.4	9.2	16.8	8.1	11.0	16.4	9.8	-	-	-
Uganda	Y0	13.0	25.9	10.7	13.9	29.2	11.3	12.0	22.5	10.1	22.1	45.2	14.6	12.4	23.7	10.5	9.9	21.1	9.2	12.5	24.7	11.3	17.2	27.4	12.5
	Y1	16.7	38.4	11.7	16.6	36.6	11.7	16.9	40.4	11.7	33.1	57.8	14.6	15.6	35.0	11.6	10.4	28.1	9.7	14.3	34.3	11.3	23.7	40.6	14.4
Zambia	Y0	25.8	27.8	25.0	25.9	28.1	25.0	25.7	27.5	25.0	27.7	41.9	22.1	25.6	26.3	25.3	23.7	24.2	23.6	26.1	28.8	25.5	28.9	32.3	26.9
	Y1	27.8	31.6	26.3	28.0	32.9	26.3	27.4	30.2	26.4	31.0	39.8	28.2	27.1	30.2	26.0	25.1	27.5	24.5	27.2	30.5	26.5	30.6	34.0	28.4
Bangladesh	Y0	28.5	33.5	18.3	30.7	36.8	18.8	22.3	24.8	16.7	33.2	38.5	19.5	27.5	32.3	18.1	25.4	27.0	20.8	24.1	31.4	16.7	35.7	36.8	26.9
	Y1	34.6	46.9	15.3	35.9	47.3	15.8	29.2	44.5	14.0	39.9	51.1	15.7	33.4	45.7	15.3	21.3	42.1	13.5	28.0	41.2	15.7	46.1	50.2	18.3
India	Y0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Y1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Indonesia	Y0	32.6	37.9	15.8	31.0	36.2	15.7	35.1	40.6	16.0	41.0	48.0	16.0	29.5	34.1	15.8	19.0	25.7	15.7	25.3	33.4	15.0	35.3	39.0	16.5
	Y1	31.9	39.3	15.4	30.2	36.6	15.0	34.4	43.4	15.9	42.6	51.2	18.0	27.6	34.0	14.5	17.0	23.3	13.5	22.2	31.1	14.6	35.4	41.1	16.2
Vietnam	Y0	21.0	29.5	19.3	21.7	32.3	20.0	20.2	27.3	18.5	19.7	39.8	15.6	21.1	28.8	19.6	17.4	22.6	16.9	23.5	31.6	21.3	-	-	-
	Y1	12.0	29.2	8.7	11.0	28.6	7.9	13.1	29.8	9.6	12.7	33.6	9.0	11.9	28.6	8.7	8.9	24.1	7.9	13.8	30.0	9.2	-	-	-

Notes: (a) Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country; (b) "E" denotes overall involvement in employment regardless of schooling status (c) "EO" denotes employment only; and (d) "ES" denotes employment and schooling.

Source: UCW calculations based on national household surveys (see Table 1).

Figure A3. **The overall decline in children's employment frequently masks very different patterns for children combining employment and schooling and children only in employment**

Percentage of children combining employment and schooling and of children only in employment, base year and most recent year, by age range and country[a]

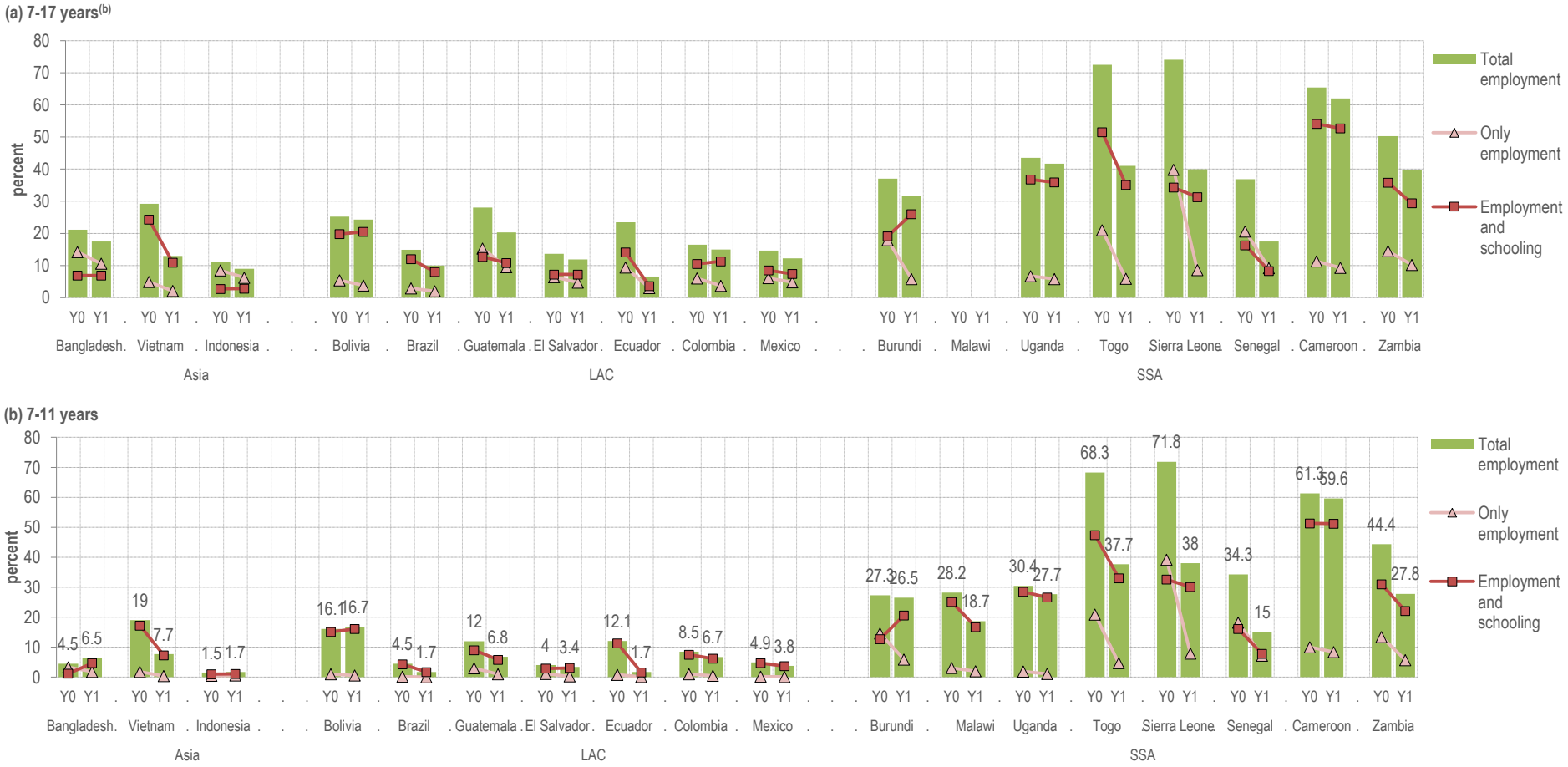


Figure A3. **The overall decline in children's employment frequently masks very different patterns for children combining employment and schooling and children only in employment**

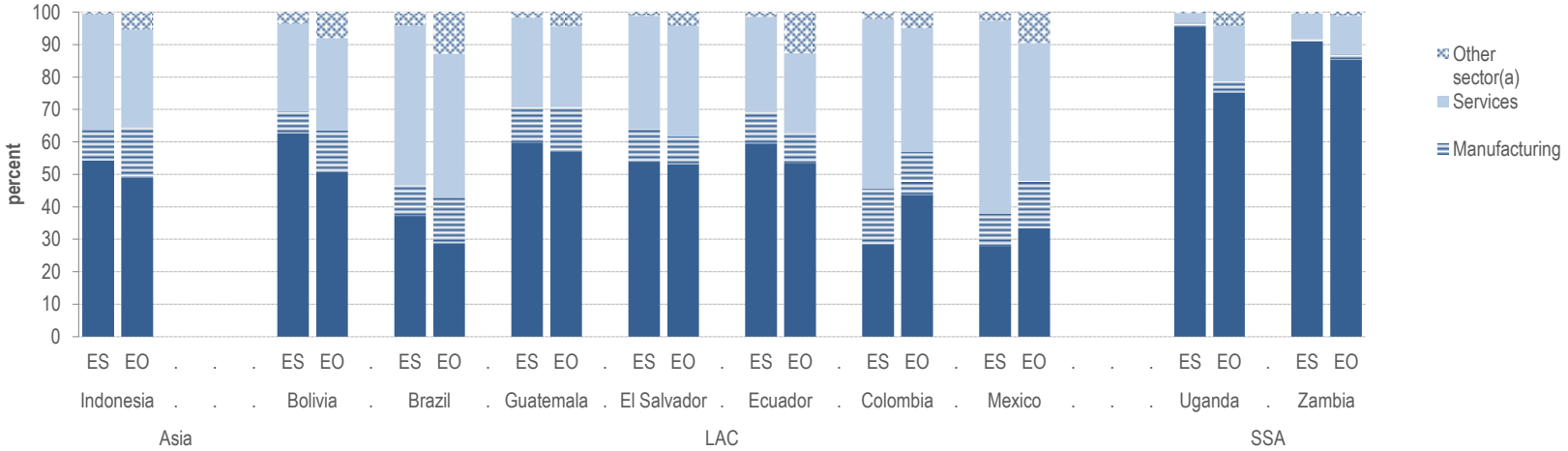
Percentage of children combining employment and schooling and of children only in employment, base year and most recent year, by age range and country[(a)]

Notes: (a) Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country; (b) Figures for Burundi, Togo, Sierra Leone, Senegal and Cameroon refer to the 7-14 years age range.

Source: UCW calculations based on national household surveys (see Table 1).

Figure A4. **The sectoral composition of employment also differs between children in employment only and children combining employment and schooling**

Children's sector of employment (% distribution), children in employment only[a] and children combining employment and schooling[b], most recent year, by country[c]

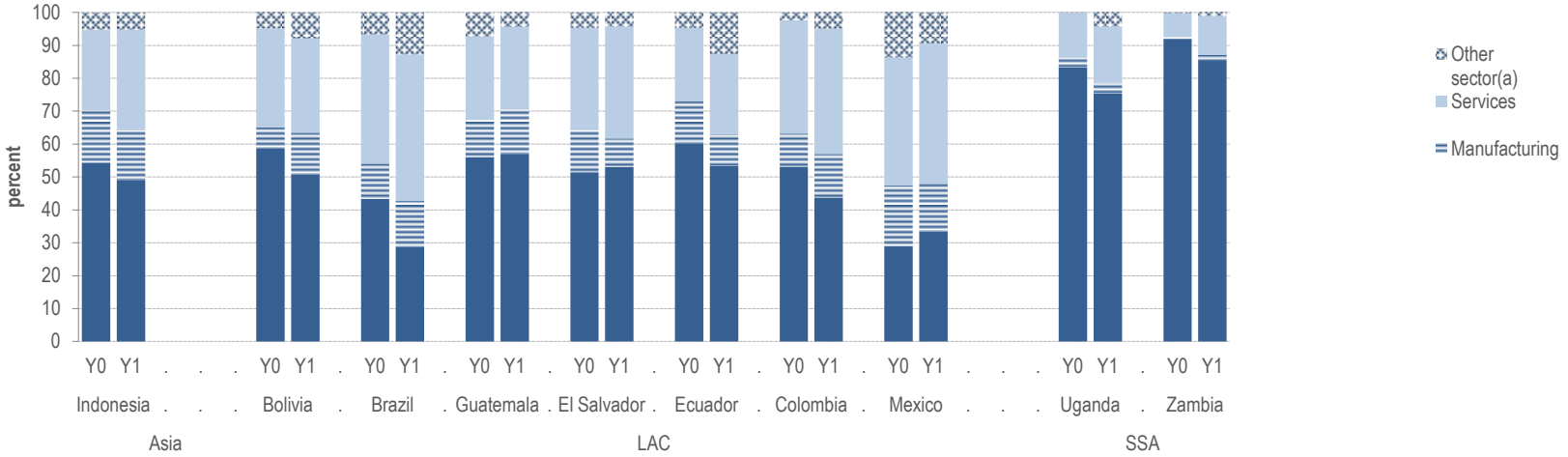


Notes: (a) Children in employment only is denoted as "EO"; (b) Children combining employment and school is denoted as "ES"; and (c) Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country.

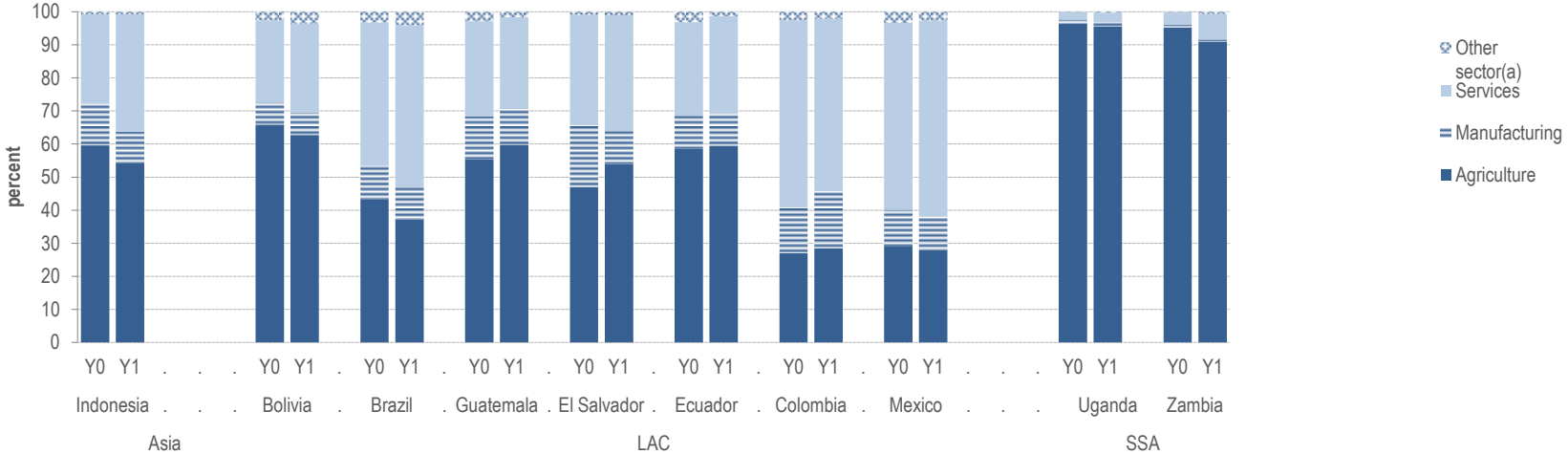
Source: UCW calculations based on national household surveys (see Table 1).

Figure A5. **There are no clear patterns in terms of how the sectoral composition of employment is changing for over time for the two groups of children in employment**

(a) Children's sector of employment (% distribution), children in employment only, base year and most recent year, by country[a]



(b) Children's sector of employment (% distribution), children combining school and employment, base year and most recent year, by country[a]



Notes: Specific reference years differ across countries; caution should therefore be exercised in drawing cross-country comparisons. See Table 1 for details on reference years for each country. Source: UCW calculations based on national household surveys (see Table 1).