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Child Labour in Asia: A Survey of the Principal Empirical Evidence in Selected Asian Countries with a Focus on Policy

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Abstract

Notwithstanding significant declines in child labour in the previous century, it remains high in several parts of the world today. While the African continent records the highest child labour force participation rates, Asia contains the largest pool of child workers. The nature, magnitude and the decline in child labour vary sharply between the Asian countries. While East Asia is now largely free of child labour, it continues to have a significant presence in South Asia and in parts of South East Asia. Consequently, within Asia, child labour is today largely a South and South East Asian phenomenon rather than an East Asian or an Asian Pacific problem.

This paper contains a survey of the literature on child labour in selected Asian countries paying special attention to both its causes and consequences. While the paper compares the Asian experience with Africa and Latin America at the aggregate continental level, it also probes in some detail the individual experience of selected Asian countries where child labour continues to pose a significant challenge. The evidence presented in this survey shows that Asian child labour, especially in South and South East Asia, has some common features. For example, the bulk of Asian child labour is in the child age group 10-14 years. The phenomenon is largely rural, and child domestic labour constitutes a significant share of overall child labour in Asia. The participation rate of Asian children, in the age group 15-17 years, in economic activities, namely, 48.4%, is the highest in the world. This rate compares with the corresponding rate of 35.0% for Sub Saharan Africa and 42.26% for the World as a whole. Moreover, there is a significant gender element in Asian child labour with boys outnumbering girls in economically active child work, while the reverse is the case with domestic child labour in Asia.

The focus of this survey is on the empirical findings that provide an insight into the policy instruments that are needed in combating this phenomenon. This survey also contains a discussion of some of the important international and national initiatives that have been taken in reducing and eventually eliminating child labour.

1. Introduction

Notwithstanding centuries of social and economic progress, significant amounts of child labour continue to prevail in several parts of the world today. Though some of the earliest instances of child labour can be found during and immediately after the Industrial Revolution in Europe, the subject has been lying dormant until recently. Thanks largely to the attempt to link child labour with the wider issue of labour standards,[1] there has been a surge of interest on this subject with a proliferation of analytical and empirical studies on child labour.[2] There are few topics that evoke as much passion and debate as that of child labour. With globalisation and the vast geographical distances that separate production and consumption points, concerns over child labour have extended far beyond the boundaries of the developing countries. Consumer organisations, child welfare activists and policy makers in the affluent countries have often joined hands to shut out imports, from Third World countries, of items that have a significant involvement of child labour in their production. While many in the developing countries see this as protection through the backdoor, others view this as reflecting a genuine concern for the welfare of the child.

Given the widespread concerns over the continued prevalence of child labour, one would expect fair degree of unanimity on the policy responses, especially on how to tackle this phenomenon. And, yet, the topic has witnessed several controversies on such basic questions as: who is a "child", what is an acceptable definition of child labour, should domestic duties or household chores be considered to be child labour, and should the appropriate policy response be legislative such as banning child labour, compulsory schooling, etc., or non legislative measures such as spreading social awareness, improved adult education and providing incentives for schooling such as mid day meals, school enrolment subsidy, etc.?

[1] See Basu (2001) for a discussion of this link and related issues.
[2] See Basu (1999), Basu and Tzannatos (2002), Bhalotra and Tzannatos (2002) for recent surveys of the literature.

Notwithstanding the divergence of views in this area, there is a history of national and international policy responses that have attempted to deal with the problem of child labour. These can be traced back to child labour legislation in the early 1830s on work in the English cotton factories.[3] In recent years, such intra national actions have taken the form of compulsory schooling, provision of mid day meals and school enrolment subsidy in order to encourage parents to keep their children in schools and out of employment. There has also been several key international initiatives that were taken to tackle this phenomenon globally. These initiatives have mainly come from the International Labour Organisation (ILO), UNICEF and the World Bank. The ILO,[4] through its 'International Programme for the Elimination of Child Labour' (IPEC), has been they key player in this. There were relatively few international organisations, other than the ILO, that took active initiatives in the area of child labour prior to the 1980s. However, in the last two decades, there has been broader international support to combat the problem of child labour. The UNICEF started in 1986 a programme on children in especially difficult circumstances. The UN Convention on the Rights of the Child was adopted in 1989 providing extensive protection to all children under 18. The UN Commission on Human Rights adopted in 1993 a Program of Action to combat the exploitation of Child Labour.

International legislation on child labour has been, almost exclusively, in the domain of the ILO. The Minimum Age (Industry) Convention, 1919 (No. 5) was adopted at the very first session of the International Labour Conference. The earliest standards (1919-32) generally set the basic minimum age at 14 years but subsequent revisions raised it to 15. The Minimum Age Convention, 1973 (Convention No. 138) that was adopted by the ILO is a significant landmark in international legislation. While permitting limited exceptions, ILO

[3] Galbi (1997) argues, however, that "the share of children employed in English cotton factories fell significantly before the introduction of effective child labour legislation in the early 1830s".
[4] See Lansky (1997) for a discussion of the various policy initiatives taken by the ILO to meet the challenge of child labour.

Convention No. 138 combined "broader coverage with greater adaptability to national situations" and "it applies to all sorts of economic activity and, like the earlier Conventions, covers children whether or not they are employed for wages" [Lansky (1997, p. 235)]. While specifying a basic standard minimum working age of 15 years, ILO Convention No. 138 allowed some exceptions – children in States "whose economy and educational facilities are insufficiently developed….may initially specify a minimum of 14 years". In another major initiative, the ILO adopted in June, 1999, Convention No. 182 on "worst forms of child labour" that set an international legal standard to protect all children under the age of 18 from some of the most extreme forms of exploitation. Unlike its predecessor (Convention No. 138), ILO Convention 182 enjoyed quick success and had the distinction of being the fastest Convention to be ratified in ILO's history, thus, underlining the growing international support against abusive child labour. According to the latest figures, 138 countries have ratified ILO Convention 182, of which 42 countries belong to Africa and 18 countries are in Asia.

Notwithstanding a large and still expanding literature on child labour in recent years, there is no survey of empirical work on Asian child labour in the published literature. And, yet, as Basu (1999, Table 1) reports, nearly 80% of the world's child labourers reside in Asia. Such a survey is the principal motivation of this paper. There have, recently, been two significant developments that have accompanied the rising concern over child labour. First, at the macro level, there is now greater attempt at quantifying the global dimension of child labour. The ILO,[5] which set up the 'Statistical Information and Monitoring Programme on Child Labour' (SIMPOC) in 1998 as the statistical unit of IPEC, the World Bank (through its World Development Reports[6]) and the UNICEF have all been active in trying to shed light on the global magnitudes. Second, there is increasing attempt at examining the main

[5] See ILO (2002) for the latest global estimates of child labour and its disaggregation between the various regions.

[6] The World Development Report, 1995 reflected the rising international concern over child labour by including a discussion on this topic in its discussion of labour markets (World Bank (1995, p. 72-73)).

determinants of child labour through econometric estimations on micro data sets of household and child level unit records. Such studies, which concentrate on the supply side of child labour, help us to identify policy variables that could prove useful in controlling child labour.

This paper contains a survey of the principal empirical findings on child labour based on both the global (macro) and the household level (micro) information with special reference to the Asian region.[7] Much of the existing evidence is on the determinants of child labour rather than on its impact. And, yet, of crucial importance from the policy viewpoint and underlying the rising concern over the continued prevalence of child labour is the adverse impact, that it is believed to have, on the child's education. This paper contains evidence on this for two countries in the Asian Pacific region, namely, Cambodia and Philippines. Another point of departure of this paper from much of the existing literature is that it reports on the extent of household chores or domestic duties undertaken by Asian children, and their impact on the child's education. Domestic duties are traditionally ignored in calculations on child labour. However, such duties are quite important in the Asian context that provides the main focus of this paper.

The plan of the rest of this paper is as follows. Section 2 discusses the latest global estimates of child labour and compares the performance of the Asian region with that of others. Section 3 discusses selective Asian evidence on the principal determinants of child labour and emphasises some of its distinctive regional characteristics. The evidence on the impact of child labour on the child's education in selected Asian countries is presented and discussed in Section 4. The picture on child domestic workers in Asia is discussed in Section 5. We end this survey by cataloguing in Section 6 some of the principal initiatives taken in the Asian context to eliminate child labour, and make some concluding remarks.

[7] In keeping with the interest of this journal, we should be focussing exclusively on the Asian Pacific region. However, we have chosen not to do so since much of Asian child labour exists in South and South East Asia rather than in East Asia and the Asian Pacific region.

2. The Magnitude and Nature of the Problem

2.1. The Definition of Child Labour and Global Estimates[8]

Following the 1989 UN Convention on the Rights of the Child and the ILO Convention No. 182, a child is defined as an individual under 18 years. "Child labour", as defined by the ILO in its latest global estimates, consists of "all children under 15 years of age who are economically active[9] excluding (i) those who are under 5 years old and (ii) those between 12-14 years old who spend less than 14 hours a week on their jobs, unless their activities or occupations are hazardous by nature or circumstance. Added to these are 15-17 year old children in the worst form of child labour" [ILO (2002, p.32)]. Notwithstanding several problems with this definition, especially the gender bias against the girl child labourer implied by the omission of domestic work from this definition, it has been used widely in the national and international enumeration of child labour.

Kebebew Ashagrie of the ILO [Ashagrie (1993)] was the first person to attempt a global estimate[10] of child labour by collecting child labour data sets from different sources. His estimate of 78.5m economically active children under 15 years of age is widely believed to be an underestimate. Using an alternative definition of child labour, namely, children in work that interfered with their normal development, UNICEF (1991) estimated that there were 80 million. such children in the age group 10-14 years alone. The early global estimates of child labour were revised upwards to 250 million economically active children,[11] aged 5-14 years, in 1995 by ILO (1996).

Table 1 presents the latest global estimates of economically active children aged 5 -14 years and its regional breakdown in 2000, as reported in ILO (2002). Note that not all these

[8] The material in this section draws heavily on ILO (2002).
[9] "Economic activity" includes most productive activities, for example, unpaid, casual and illegal work as well as work in the informal section. It does not however include household chores in one's own home but does include work (paid or unpaid) done by the child in family enterprise or domestic work carried out in another household.
[10] See, also, Grootaert and Kanbur (1995, p.188-191) for a discussion of the early estimates of child labour.
[11] This figure excludes the estimates of child labour in developed and transition economies.

"economically active" children are child labourers since child labour, as defined above, is only a subset of child work. Table 1 shows that the Asia Pacific region had the highest number (127.3 million) of working children followed by Sub-Saharan Africa with 48 million and Latin America and the Caribbean with 17.4 million children. These three top ranked regions retain their ranking in terms of their share of the world's population of chid workers, with 60.33% of that population residing in the Asia/Pacific region, 22.75% in Sub-Saharan Africa and 6.35% in the Middle East and North Africa. In 2002, therefore, these three regions accounted for over 90% of child workers in the world.

Table 1 also presents in the last column the region's share of children in the age group 5 -14 years. A comparison of the last two columns of Table 1 shows that the Latin American and Caribbean region's share of child workers (8.25%) is well matched with that (8.92%) of the total child population, aged 5 -14 years, in the world. In contrast, the Asia/Pacific region and Sub-Saharan Africa bear a disproportionately large share of the world's population of child workers. Between these two regions, Sub-Saharan Africa fares much worse since its share of child workers is almost twice its share of children in the age group, 5 -14 years. This is reflected in the very high child participation rate in Sub-Saharan Africa (29%), much higher than that in the Asia/Pacific region (19%), not to speak of the rest of the world.

Table 2 presents a breakdown of the world's population of economically active children by the three age groups, 5 – 9 years, 10 – 14 years and 15 – 17 years. The corresponding statistics of the two worst performing regions, namely, Asia/Pacific and Sub-Saharan Africa, are also presented for comparison. It is interesting to note that, while the mismatch between the numbers in the last two columns persists in case of Asia/Pacific and Sub-Saharan Africa for all the three age groups, there is a qualitative difference in the experiences of the two regions. While the gap in case of young children (5 – 9 years), is marked in case of Sub-Saharan Africa, it is non existent in case of the Asia/Pacific region.

The gap narrows sharply for older children in Sub-Saharan Africa, unlike for older children residing in the Asia/Pacific region. The picture is actually reversed for the highest child age group (15 – 17 years) with the gap between the two share figures virtually non existent for Sub-Saharan Africa in sharp contrast to the large gap that opens up for the Asia/Pacific region. This is reflected in the fact that while the child participation rate in economic activities increases very sharply with the child age group in the Asia/Pacific region, the increase is much less sharp for Sub-Saharan Africa. Consequently, for children in the middle (10 – 14 years) and upper age groups (15 – 17 years), the participation rates in the Asia/Pacific region exceed those in Sub-Saharan Africa. Previous commentators [see, for example, Basu (1999)], who have remarked that the child participation rates in Sub-Saharan Africa are the highest in the world, have overlooked the age disaggregated picture, especially of children in the higher age group (15 – 17 years). Since a significant number of economically active children in the age group, 15 – 17 years, work in what ILO (2002) calls "hazardous" and "unconditional worst forms of child labour", it is reasonable to conclude from these figures that a distinguishing feature of child workers in the Asia/Pacific region is their relatively high involvement in such extreme and harmful forms of child labour. Since Convention No. 182, adopted by the ILO in June, 1999, applies to these "worst forms of child labour" and sought to protect children under 18 from these "most extreme forms of exploitation", it would appear that this Convention is of special relevance to policy makers in the Asia/Pacific region.

2.2 The Heterogeneous Picture on Child Labour within Asia

The previous subsection has discussed some of the distinctive features of child labour in Asia. Our discussion may imply that it makes sense to treat the whole of the continent as a homogenous region with no inter regional differences on child labour. Table 3, which

presents the participation rate of children, aged 10 – 14 years, in economic activities in selected Asian countries in 1980 and 1999, shows that this is certainly not the case. There is huge variation in these rates between the Asian countries, especially in comparison with selected countries in the African continent whose comparable statistics are presented in Table 4. Table 3 shows that child labour is a particularly serious issue in South Asia (especially, Nepal and Bangladesh) and in some other parts of the continent such as Cambodia and Thailand. Table 3 also shows that in the two decades, 1980 – 1999, there has been considerable progress in the elimination of child labour as reflected in the reduction in the child's labour force participation rates in all the countries shown in Tables 3 and 4. Table 3 shows, however, considerable unevenness in the experiences of Asian countries in this regard. While China, Malaysia and Vietnam have registered impressive reductions in the child labour participation rate with China leading the way, the progress has been much less satisfactory in the South Asian countries and in Cambodia. A comparison with the African experience presented in Table 4 shows that, in general, the reductions there have been, in proportionate terms, much less than that in the Asian countries. It is sad to note that, even in 1999, Nepal in Asia and Ethiopia, Rwanda and Ghana in Africa register child labour force participation rates that are well in excess of 40%. A comparison of Tables 3 and 4, also, confirms the relatively high labour force participation rates of 10 –14 year old children in African countries in relation to those in Asia. While most African countries registered child labour force participation rates of 20% or above in 1999, this is a relatively rare occurrence in Asia with only Bangladesh, Cambodia and Nepal recording such high rates of child labour force participation. The per capita GNP figures show that there is, at the country level, an inverse relation between the child labour force participation rate of 10 – 14 year old children and per capita GNP. This is confirmed by Figures 1 and 2 which show this inverse relationship in case of Asia and Africa, respectively. This is, however, not always consistent

with the individual and household level micro econometric evidence, discussed later, that shows that the household's economic status seldom has a significant impact on the labour force participation rate or the labour hours of its resident children.[12] A comparison of Figures 1, 2 shows that, while in both continents the child labour force participation declines with increase in per capita GNP, the decline is much faster in Africa. Consequently, the point of zero child labour force participation rate is reached at a much higher per capita GNP figure in Asia than in Africa.

2.3 The Profile of Child Labour in Selected Asian Countries

As South Asia contains the largest pool of child labourers within Asia, it is instructive to outline briefly some features of child labour in two countries which are typical of the sub continent, namely, Nepal and India. We, then, turn to the experiences of Cambodia and Vietnam which have seen significant reductions in child labour in the past two decades.

Nepal

Nepal is one of the poorest countries of the world. With a child labour force participation rate of 43% in 1999, down from 56% in 1980, it has one of the highest incidences of child labour anywhere. A profile of the child labour situation in Nepal is contained in the report prepared by Suwal, Kumar and Adhikari (1997). This report, based on the Migration and Employment Survey, 1995/96, concluded that poverty is the main reason for the practice of child labour in Nepal. The Nepalese child work force of 2.6 million children consisted of 1.439 million working female children and 1.156 million working male children. Nepal is quite typical of the South Asian countries and of most other developing countries in having a greater number of female children than male children in its aggregate

[12] See Ray (2000a, 2000b, 2000c, 2002), Addison, et.al. (1997), Rosati and Tzannatos (2000), Kanbargi (1991), Maitra and Ray (2002), Chaudhuri and Wilson (2002) for evidence, at the household level, of the impact of economic circumstances on child labour.

workforce. The higher participation rate of Nepalese female children in the aggregate child work force is mainly due to their higher participation rates in non economic activities.

In a recent report on the child labour situation in Nepal entitled "IPEC Country Profile: Nepal", that is available on its website, www.ILO.org, the ILO has noted that child labour is a widespread and severe problem in Nepal. It has identified the following factors as contributing to child labour in Nepal: (i) acute poverty (ii) lack of access to education for children (iii) rural urban migration (iv) family problems (v) inadequate enforcement of labour and criminal laws (vi) lack of education of parents. The ILO-IPEC has identified the following sectors as associated with the "worst forms of child labour": (a) Banded labour arising from the Nepalese practice[13] of Komaiya and Saunki (bonded labourers' debts), (b) Domestic child labour, (c) Portering, (d) Rag picking and (e) Trafficking.

India and Pakistan

Because of its sheer size and total population, India is the country with the largest single pool of child workers anywhere in the world. Unlike in Nepal, there is a large literature on child labour in India. This includes the classic study by Myron Weiner [Weiner (1991)] which is regarded as an authoritative text in the overall area of child welfare. Other examples include Kanbargi (1991), Ray (2000c) and Ramachandran and Massun (2002).The estimates of child labour in India vary greatly reflecting the disagreements on definition and the complexities of enumeration. For example, India's 1981 Census reports only 13.6 million children aged 5–14 years in the work force, consisting of 8.1 million males and 5.5 million females, with an overall participation rate of 7.6%. The official National Sample Survey of 1983 reports a much higher figure of 17.4 million child labourers, while a study by the Labour Ministry put the figure at 44 million, including children paid in kind as well as in

[13]This practice was declared illegal by the Nepalese parliament in July, 2000.

cash. Notwithstanding such wide differences in the estimated magnitudes, there is general agreement that child labour is a serious issue in India and that it poses a significant obstacle to economic and social progress. Unfortunately, such a realisation has rarely translated into any visibly discernible concern in the political arena.

Unlike in India, information on child labour in Pakistan is sketchy. The Government of Pakistan, carried out in 1996 a sample survey of households to provide baseline information on the extent and socio economic characteristics of child labour throughout the country. This survey made the following observations on child labour in Pakistan.

(i) In Pakistan, child labour is about 3.3 million, of whom 2.4 million (73%) are boys, and 0.9 million (27%) are girls. The quantum of child labour increases with age, i.e. the older the child, the higher the rate of participation in economic activity.

(ii) About 71% of the 3.3 million employed children worked in elementary (unskilled) occupations relating to agriculture, sales and services, mining, construction, manufacturing and transport sectors where farm activity dominates.

(iii) One third of the 3.3 million employed children are literate from the formal system of education. Male child labour (40.3%) is more educated than female child labour (11.2%).

(iv) Nearly one half (46%) of the employed children worked more than the normal working hours, i.e. 35 hours per week, with 25% working more than 56 hours or more per week in the urban areas.

(v) The most cogent reasons given by parents/guardians for letting their children work are: to assist in household enterprises (54%), to supplement the household income (27%) and to do household chores (14%).

Cambodia[14]

Table 3 shows that, outside the Indian sub continent, the Asian country with the highest participation rate of 10–14 year old children in economic activities is Cambodia. Since Cambodia is in the Asia Pacific region, its experience on child labour is of special interest to readers of this survey. While we provide a brief survey of some of the key features

[14] This brief profile of Cambodian child labour is based on the "Report on Child Labour in Cambodia, 1996" prepared by the National Institute of Statistics in Phnom Penh in July, 1997 with technical help from the ILO/IPEC.

of Cambodian child labour in this section, we provide detailed econometric evidence on its determinants and on its impact on the child's education in the following sections.

Although the Socio-economic survey of Cambodia (SESS), 1993 provided broad information on the economic activities of children, aged 10 – 14 years, in the country, the available information data was not comprehensive enough to provide a detailed picture of the child labour situation in the country. In 1996, the National Institute of Statistics in Phnom Penh, with technical help from the ILO-IPEC, prepared a report on child labour in Cambodia based on the 1996 Socio-economic Survey of Cambodia (SESC, 1996). The survey estimated that there were about 218,109 "working children" in the age group 5 – 14 years with a participation rate of 6.9% of children in this age group. The latter figure consists of a participation rate of only 1.6% for children in the 5–9 years age group and 12.3% for children in the 10 – 14 years age group. The number of working children in Cambodia goes up to 554,335 for children in the age group 5 - 17 years – yielding a participation rate of 14.2%. The latter figure is made up of a rate of 8.1% in the urban areas and 15.4% in the rural or, alternatively, 11.7% in case of boys and 16.9% in case of girls. Almost 4 out of 10 working children aged 5-17 years were attending school. The survey found, quite untypically for an Asian country and in sharp contrast to the South Asian experience, that working children from the rural areas have a higher school attendance rate (28.1%) than that from the urban areas (22.1%). The Report ascribes this unusual phenomenon to the fact that, in Cambodia, combining work and school is more difficult in urban areas, especially for girls (only 11.5% were attending school). The survey also found that, while 72.1% of working children had completed at least class 1, and most had attended some classes in primary school, few had a secondary school certificate or diploma.

Most of the Cambodian working children resided in the rural areas (90.9% for the age group, 5 - 14 years). The majority of working children worked in the agricultural sector. An

important reason for this is that Cambodia is an agricultural country and most of the children helped their parents or worked for pay in agricultural works which are convenient for child to help.

Working children in Cambodia were also found in the Services and Industry Sectors. The bulk of the industrial child workers were found in the informal sector helping their parents and relatives in small manufactures or handicrafts such as the manufacture of bakery products, grain mill products, manufacture of wearing apparel, etc. For the service sector, most of the working children worked as sales workers in the retail sale via houses, via stalls and markets, retail sale of textiles, clothing, footwear and leather goods. Another significant result of the SESC, 1996 was the large number of children in household chores – for instance, in the 5-14 year old age group, the number of such children was almost four times the number of working children.

An important element in the discussions on child labour is the interaction between child employment and child schooling. A recent study [Ray and Lancaster (2003)] provided evidence from a selection of countries on the four possible combinations of employment and schooling. This study found that the Asian countries Cambodia, Philippines and Sri Lanka, disagree as much between themselves as with countries in other Continents. There is a general consensus that the "school only" rates decline as child age increases. Within the Asian context, Cambodia lags behind Philippines and Sri Lanka in recording much lower "school only" rates. A comparison shows that, in case of both boys and girls, a far greater percentage of Cambodian children combine schooling with work than in the Philippines.

Further insights into the characteristics of Cambodian child labour are provided by the multinomial logit marginal probabilities of the 4 outcomes reported in Ray and Lancaster (2003). The study found that, *ceteris paribus*, older children are likely to move out of "school only" and "work only" status and combine schooling with work. Children from female

headed households are less likely to experience “school only” status than other children. Further, increased education level of adult male and adult female in the household help to pull children out of “work only” status and into “school only” outcome. Consistent with the profile of child labour in Cambodia noted earlier, the “base probabilities” presented in Ray and Lancaster (2003) show that, before the various demographic and other characteristics start having their impact, a high percentage of Cambodian children (64.4%) combine schooling with work, a figure that is much higher than in the other Asian countries, namely Philippines and Sri Lanka.

Vietnam

The final Asian country, whose child labour profile is briefly presented here, is Vietnam. As Table 3 showed, over the two decades, 1980-1999, Vietnam had one of the most impressive reductions in the participation rate of 10 - 14 year old children in some form of economic activity. The participation rate in Vietnam, which was 22% in 1980 fell to a third (7%) in 1999, a rate of reduction that is only surpassed by that in China. Consequently, Vietnam has recently attracted attention from investigators analysing child labour [Rosati and Tzannatos (2000), Edmonds and Pavcnik (2003)]. Both these studies use two rounds of the Vietnam Living Standards Survey (VLSS), a multi-purpose household survey conducted by the government of Vietnam with the assistance of The World Bank. The two rounds of the VLSS span the period of rice market liberalisation in Vietnam. The first round of the VLSS was conducted between September, 1992 and October, 1993, and the second round of the VLSS was conducted between December, 1997 and December, 1998. Table 5, which is reproduced from Edmonds and Pavcnik (2003, Table 1), shows the changing profile of Vietnamese child labour over 1992/93 – 1997/98 by comparing the descriptive statistics (mean values) of rural children aged 6-15 years in those years. While the average rural child

labourer in Vietnam was marginally older (10.67 years) in 1997/98 than in 1992/93 (10.34 years), the gender breakdown of child labour has remained virtually unchanged over this period. However, what is impressive is the sharp reduction in the rural child participation rate (down from 0.60 in 1992/93 to 0.48 in 1997/98) and the weekly hours worked (13.32 in 1992/93 declining to 9.83 in 1997/98).

A more complete picture of the changes in Vietnamese child labour over 1993-98 is presented in Rosati and Tzannatos (2000, Tables 1-9) who use the same data as Edmonds and Pavcnik (2003) but report the calculations for Vietnam as a whole. A summary of the changes in the child labour situation in Vietnam over this period (1992/93 to 1997/98), as noted by Rosati and Tzannatos (2000), is as follows.

(i) On average, school enrolment went up from 84.3% to 91.8%, while child work participation decreased from 34.8% to 22.2%. If one recalls the corresponding rural figures reported in the Edmonds and Pavcnik (2003) study, it is clear that the rural child labour force participation rates exceed the urban figures – in other words, like in the other Asian countries, child labour is largely a rural phenomenon in Vietnam.

(ii) The gender disaggregated estimates do not show large differences by gender, though girls were more likely than boys to be "only working" and their school enrolment was consequently lower. The gender differences in Vietnam are smaller than that observed in most other countries. A comparison of Table 1 in Rosati and Tzannatos (2000) with Appendix Table A1 of Ray and Lancaster (2003) suggests that a far greater percentage of children combine schooling with employment in Cambodia than in its neighbouring country, Vietnam.

(iii) The increase in the school enrolment rates of Vietnamese children over this period was remarkable both in the primary and the lower secondary education. The percentage of children, who enjoyed "school only" status increased significantly over 1993-98 for both boys and girls, but more for the latter. The gender imbalance in school enrolment in favour of boys in 1993 had given way to a more even picture in 1998 (75.7% for boys compared with 75.1% for girls).

(iv) The school enrolment rate by age, presented in Tables 3 and 4 of Rosati and Tzannatos (2000), sheds more light on the change in the gender differentials. In 1993 there was a relatively large difference between girls and boys of post primary age in their school enrolment rates and their labour supply. However, by 1998, the enrolment rate of girls in the secondary education has increased sharply matching that of boys.

(v) Over this period, not only has the number of working children in Vietnam decreased, but so has the amount of work performed by each working child.

Before concluding this section, it would be useful to make a regional comparison between Cambodia, Philippines and Vietnam with respect to the choices their children make between the four possible combinations of school/not in school and work/not in work. Table 6 presents the comparative statistics, reported in Ray and Lancaster (2003) for Cambodia and Philippines and in Rosati and Tzannatos (2000) for Vietnam. The figures are for the child age group 12-14 years which, as we noted earlier, is of particular interest because ILO Convention No. 138 allows "light work" for these age groups. A greater proportion of Cambodian children combine school and work than children in Philippines and Vietnam. In contrast, a much greater proportion of Philippines' children enjoys "school only" status than in Cambodia or Vietnam. The overall school enrolment rates, at least for girls for whom the figures are available from all the 3 countries, are quite similar. The school enrolment rates decline, and the work participation rates increase, as child age increases, in all the 3 countries.

3. The Causes and Determinants of Child Labour in Asia

The discussion in the preceding section shows the heterogeneous nature of child labour in Asia, and that it makes little sense to talk of "Asian child labour" as a homogeneous item. However, the preceding discussion has also shown that the Asian countries, where child labour is a significant issue, do share some common features. For example, child labour in Asia is largely a rural phenomenon, the child labour participation rates have generally been declining over the past two decades, the participation rates increase with the age of the child and the household chores or domestic duties are mostly performed by the girls. In this section, we discuss some of the principal causes of child labour, and report evidence on its important determinants in the Asian context. An examination of the principal determinants of

child labour is of much policy interest since it helps to identify variables that will prove useful in efforts to reduce and eventually eliminate child labour.

Table 7, which is based on the Cambodian Child Labour Survey, 2001, lists the principal reasons for child work, as reported by the adult and the child in the SIMPOC questionnaires. This table reports the percentage of responses that identify a particular factor as the main reason for child work. The following features are worth noting. First, there is high consistency between the adult's and the child's responses. Second, both sets of responses list household poverty, the need to help in household enterprise and the need to supplement household income as the three most important reasons for child work. As the 1996 report on child labour in Cambodia prepared by the National Institute of Statistics, Phnom Penh, showed, these three also constituted the most important reasons for child work in Cambodia in 1995/96. The picture in this respect hasn't therefore changed much in Cambodia over the 1996-2001 period. Of these, household poverty, according to both the adult and the child, is by far the most important reason for child work.

In the Cambodian Child Labour Survey 2001, the adult and the child were asked to choose one from a selection of alternative states as their preferred choice in future. Table 8 shows the percentage of responses that have nominated a particular state as their preferred choice. Once again, there is a good deal of consistency between the adults' and the childrens' responses. Both respondents prefer the child going to school full time to working for income full time. In fact, the former is the most preferred option. Taken together, Tables 7 and 8 suggest that while the parents and the children in Cambodia put a high premium on the child's full time schooling, household poverty and the need to supplement household income tend to pull the child away from their first choice and put her/him into full time employment.

Let us now turn to the econometric evidence on the determinants of child labour and its closely related activity, child schooling. Such evidence will address the key policy

question: which are the variables that significantly affect a child's decision to participate in an economic activity? Ray (2000c) presents such evidence from India in the form of the parameters estimates of the logit regression of a child's participation in an 'economic activity' on a selection of demographic, socio-economic and state level characteristics. The following conclusions follow from this study.

(i) *Ceteris paribus*, a child in a female headed household or one belonging to the backward classes is more likely to be involved in wage based child labour than other children.

(ii) The size and high significance of the poverty coefficient in the case of wage based child labour confirms that household poverty is one of the main reasons for children entering the labour market.

(iii) *Ceteris paribus*, boys are more likely than girls to participate in an 'economic activity'.

(iv) Rising education levels of adult members exert a strong, negative impact on the propensity of a household to put its children into employment. There is a strong policy message in this result. A more effective means of reducing child labour than simply relying on legislature measures is to improve the learning experience of the child's parents and promote social awareness.

The above discussion is based on the South Asian evidence on the impact of the various social economic and demographic characteristics on the child's participation in an economic activity. Let us now extend that discussion to look at the impact of the various determinants on the child labour hours, rather than simply the child's labour force participation, since it is much easier to control child labour hours than the child's labour market participation itself. Unfortunately, such evidence is much more limited in the literature and hardly any, that we are aware of, exists for the Asia Pacific region. This is because data on child labour hours is very difficult to find. The situation has eased lately with the help given by the ILO-IPEC to the data collecting agencies of the individual countries through its SIMPOC programme. An example of such collaboration is the Cambodian Child Labour Survey, 2001. Ray and Lancaster (2003) present evidence on this Cambodian data, from the joint regression of the educational outcome (SAGE) and child labour hours on a set of determinants. While the estimated magnitudes of the parameters of the SAGE equation are

briefly discussed in the following section, let us note the following from the parameter estimates of the child labour hours equation in Cambodia presented in Ray and Lancaster (2003). Unlike the South Asian evidence on the determinants of child participation in labour market, discussed above, neither child gender nor the child's age seems to have any significant impact on the working hours of Cambodian children. However, a point of similarity with the South Asian evidence is the strong role that rising education levels of adults in the household play in reducing child labour. This study also found that improved economic prosperity, as reflected in the ownership of TV, phone and radio, does reduce child labour hours. Another interesting result of some policy significance is that Cambodian children who live in communities and localities with greater access to water and electricity will be working lesser hours. Finally, the Cambodian evidence shows that children who work long domestic hours are likely to be working longer hours in economic activities as well.

4. The Impact of Child Labour on Education[15]

ILO Convention No. 138, Article 7(b) stipulates that "light work" may be permitted as of the age of 12 or 13 provided it does not "prejudice attendance at school" nor "the capacity to benefit from the instruction received". This raises the issue of the impact of child labour on the schooling of children in these age groups. Notwithstanding a large and rapidly expanding literature on child labour, there is not much empirical evidence on this issue since much of this literature has concentrated on analysing the causes of child labour rather than studying its consequences, especially for the child's learning. The cost of child labour for human capital accumulation has simply been assumed rather than formally investigated. The lack of much empirical evidence on the cost of child labour to the child's education, and hardly any for the Asian region, is a significant gap in the literature since much of the policy

[15] The material in this section is largely based on a recent study that I did for the ILO. The interested reader may refer to Ray and Lancaster (2003) for more details.

interest on child labour stems from its supposedly adverse impact on human capital accumulation.

Before turning to the econometric evidence on the impact of child labour on the child's learning, let us recall some visual evidence for Cambodia and Philippines presented in Ray and Lancaster (2003). The graphs of the relationship between current school attendance rate and weekly work hours are based on the information contained in the Cambodia Child Labour Survey, 2001 and that conducted during the period August, 1994 – July, 1995 by the National Statistics Office in the Philippines. It is clear from the graphs that work hours do adversely affect both school enrolment rates and the school outcome variable, though the shape of these relationships varies between the two countries. Further evidence on the adverse impact of child labour on her/his learning skills in Cambodia is contained in Ray and Lancaster (2003), which shows, separately for working and non working children in Cambodia, the percentages of children in the various age groups who can read and write. The cost of child work is evident in the higher percentages that non working children enjoy over working children in reading and literacy in the child age group, 12-14 years, where "light work" is permitted under ILO Convention No. 138, Article 7(b). However, this study also found that the adverse impact of child work on the child's literacy skills is felt only in the higher age groups – typically, beyond 10 years.

The graphs provide only prima facia evidence on the damage caused to the child's learning by child labour. They do not provide any clear evidence on the impact of child labour hours on human capital accumulation since they do not control for the other variables. To get a clearer picture, we now present econometric evidence on this from Cambodia and Philippines.

Tables 9, 10 present the OLS and IV coefficient estimates in the regression of SAGE[16] (i.e. age and entry point corrected years of schooling) and the ability to read and write variables on a selected list of determinants in Cambodia. In keeping with the focus of this survey, we will concentrate on the estimated linear and quadratic coefficients of the variable measuring the weekly hours of child work. They provide robust evidence of the adverse impact of child labour hours on the child's education. Note, however, from the statistically significant and positive estimated IV coefficients of the squared "work hours variable" that the adverse marginal impact of child labour hours on schooling weakens, though only very slightly, in the higher levels of weekly work hours. Though not the focus of this paper, it is worth noting from Tables 9 and 10 the strong positive role that the adult's education level can play in increasing the child's educational experience. Further evidence on the impact of weekly hours on the child's schooling is provided in Ray and Lancaster (2003) which reports the gender disaggregated IV estimates for Philippines. It is interesting to note that the estimated adverse impact is statistically significant in case of boys but not in case of girls in Philippines.

The discussion in this section has focussed on the cost of child labour in terms of its impact on the child's education. We have presented robust evidence that shows that a child who is engaged in economically active work is less likely to be attending school. Alternatively, an extra hour of child labour reduces the child's schooling experience, as measured by the years of schooling received by the child. Child labour has other potential costs too, for example, on the child's health. The evidence on the impact of child work on child health is still quite scanty though there is an emerging empirical literature on Asian data. In a study on Indian data on rural households, collected by the National Council of

[16] SAGE, which denotes 'schooling for age', measures the child's schooling attainment relative to his/her age. It is given by SAGE = $\left(\frac{\text{Years of Schooling}}{\text{Age - E}}\right)$ x 100 where E represents the usual school entry age in the economy.

Applied Economic Research (NCAER) in New Delhi, Cigno and Rosati (2000) found that children working full time tended to have a better nutritional status, as measured by "body mass" (i.e. weight divided by square of height), than children who study. Children who attend school at the same time as working had the worst nutritional status of all children. One should, of course, treat this result with some caution since superior health may induce child work rather than the other way round. There is some support for this reverse causation in a study on data from rural Vietnam, conducted by O'Donnell, Rosati and Doorslaer (2003), that investigates the impact of child work on child health. Using data from the Vietnam Living Standards Survey, 1992-93 and 1997-98, they find "little evidence of a contemporaneous impact of child work on health but work undertaken during childhood raises the risk of illness up to five years later and the risk is increasing with the duration of work". Thus, in terms of its impact on both human capital accumulation and child health, the costs of child labour will be felt in the long run, though, as O'Donnell, Rosati and Doorslaer (2003) also conclude "there is no evidence that work impedes the growth of the child".

5. Child Domestic Workers in Asia[17]

A distinguishing feature of child workers in Asia is that a large number of them are child domestic workers (CDW). These include children working as child minders, maids, cooks, cleaners, gardeners and general house-helps. The lack of overall information on the number of child domestic workers worldwide, or, even in a regional context such as Asia, prevents a thorough analysis of the incidence and nature of CDWs in many Asian countries. However, recently, some country specific estimates of Asian child labour have become available. For example, Sharma, et. al. (2001) in a study done for the ILO-IPEC estimated that there are about 55,000 CDWs in the urban areas of Nepal. Pflug (2002, p. 5) quotes a

[17] The material in this section draws heavily on a report prepared for the ILO-IPEC by Pflug (2002).

UNICEF study as estimating that in Dhaka, Bangladesh, as many as 300,000 children work in domestic labour. The UNICEF study estimated the size of the CDW in Philippines to be 766,000 children, of whom 29,000 (4%) are in the age group 10-14 years. The corresponding figure for Sri Lanka was estimated to be 100,000 children. There is very little certainty or reliability in these numbers, especially when one is talking of countrywide estimates.

Poverty has been identified as one of the major root causes of child domestic labour in Asia. Other factors, such as cultural attitudes to child labour and to CDL, in particular, and traditions of fostering have also been identified as contributing to CDL. In many urban centres of Asia, the increasing need for both women and men of the household to go outside the house to work causes an increasing number of young women and children to be pulled into domestic work. Most CDWs in Asia come from poor and disadvantaged areas and find employment in middle class families in towns and cities. These children mostly live away from their immediate families and rarely go home. In several cases, child domestic labour infringes on children's rights by subjecting them to physical, sexual and emotional abuse, and deprives them of educational opportunities. However, the joint involvement of parents and children in many instances of domestic child labour affords the latter a degree of parental protection. This partly explains a complementary relationship between the labour supply of adult women and of children observed in the Pakistani context by Ray (2000a, 2000b).

Pflug (2002) has outlined the following key features of the CDWs in Asia.

(i) Age: There is a preference for hiring young children in the age group 10-14 years for domestic work. This is mostly due to the fact that salaries increase with age and that teenagers and adults are perceived to be more difficult to manage for employers. A study by Braganza, Pflug and Saldanha (1999) estimated that, in India, 20% of all domestic workers are below the age of 14 years, with many starting work as early as 5-10 years of age. A study by Shamin, et.al. (1995) concluded that more than 20% of child domestic workers in Bangladesh were between 5-10 years of age.

(ii) Educational Literacy: In Asia on the whole, only a small number of CDWs are given the chance to attend school while working in an employer's household. The denial of the child access to education reflects a belief that a better educated child will become less dependent on the employer and more likely to leave the domestic sector. Thanks to NGOs and other concerned agencies, this attitude is changing in a number of Asian

countries. For example, in Nepal, the "Drop-in Centres" in Kathmandu and the NGO CWIN ("Child Workers in Nepal Concerned Centre") encourage employers to allow CDWs to attend non formal education classes and to follow this with formal schooling.

(iii) Family and Community Background: The CDWs mostly come from poor rural, often farming, families. Children from families where the mother is a domestic worker can be found to regularly accompany and help their mothers at work and so get pulled into domestic work. A good example of this can be found in Mumbai, India where both the adult domestic worker and the CDWs usually come from a poor urban slum area. Also, as the experiences of Delhi, Kolkata and Mumbai in India show, the children of refugee families living in refugee colonies on the fringes of the urban metropolitan centres often end up as CDW working in affluent middle class homes. Moreover, as in Nepal for example, there might be a large number of children from a particular caste or ethnic group in domestic labour.

(iv) Rural to Urban Migration: Industrialisation and economic reforms all over Asia have encouraged the migration of people, including children, from poorer rural areas to urban centres looking for better economic possibilities and employment. The migrants' expectations are not always realised fully, and the migrant adults and their children often end up as domestic workers. Many working children in Asia come from landless families and, as in the case of Nepal, the process of migration and of settling in urban areas makes children vulnerable to the worst forms of child labour, with CDL identified as being one of them.

6. Concluding Remarks

All statistical evidence that is currently available agree that, globally as well as regionally, the number of children involved in child labour has declined. As the numbers presented in ILO (2002, Table 4) show, the number of children, aged 5-14 years, globally at work in economic activity fell from 250 million children in 1995 to 211 million children in 2000. In terms of child labour participation rates, the work ratio fell from 24.7% in 1995 to 17.6% in 2000. As the numbers presented in this survey showed, there has been similar declines in Asia which has the largest pool of child workers in any continent. While these numbers are not always highly reliable and should be treated with some caution, there is no denying that, in both aggregate terms and in terms of the regional breakdown, the last few decades have seen a sharp decline in the magnitude of child labour. However, as our survey has also shown, the progress on the reduction in child labour has been quite uneven especially in the Asian context. While countries such as China, Sri Lanka and Vietnam have witnessed

impressive reductions in child labour and improvements in child schooling, Bangladesh and Nepal have lagged far behind. The South Asian region, in general, still has child labour participation rates that are unacceptably high by current standards. Today, in the Asian context, child labour is much more of a South Asian and, to a lesser extent, a South East Asian phenomenon, rather than an East Asian problem. Consequently, we have dwelt at some length on the experiences of countries such as India, Pakistan, Nepal, Cambodia, Philippines and Vietnam in this survey of child labour in Asia.

Accompanying the decline in the magnitude of child labour has been rising concern on the magnitude and nature of the child labour that still prevails in the world today. This is reflected in the recent proliferation of the literature on child labour. A widespread appreciation of the potentially harmful consequences of child labour both for the child and for the society at large has triggered off a set of concerted international actions to eliminate child labour. The ILO, through its Conventions 138 and 182, the UN through its Convention in 1989 on the Rights of the Child, and the UNICEF have been at the forefront of international efforts to combat this phenomenon. As part of broader efforts to develop effective and long term solutions to child labour, the ILO, UNICEF and the World Bank initiated the joint inter-agency research program, “Understanding Children’s Work and its Impact”, the UCW Project, in December 2000 based in Florence, Italy. The ILO-IPEC has recently adopted a set of “time bound programmes for the eradication of the worst forms of child labour”. A “time bound programme” is essentially a set of tightly integrated and coordinated policies to prevent and eliminate a country’s worst form of child labour within a defined period of time. In targeting the “worst forms of child labour” in its time bound programme, the ILO-IPEC acts on a belief that this is an effective way to mobilise society to address the problem of child labour as a whole. It is worth pointing out that ILO Convention No. 182, which focuses on these “worst forms of child labour” had much greater success in achieving ratification than

its predecessor Convention No. 138. While Nepal was the first country to be put through the time bound programme, much of the activities of ILO-IPEC has concentrated on Asia. The ILO-IPEC programme in the Philippines in 1995-97 is a good example of this. In order to develop and strengthen research on child labour in South and South-East Asia, the Bangkok based Regional Working Group on Child Labour in Asia created a project to improve action-oriented research on the worst forms of child labour. While the ILO has been the lead authority in international actions on child labour, the Work Bank[18] has also been active in this area. For example, the World Bank has been responsible for starting several child labour initiatives in project in India. These include the District Primary Education Projects, the Integrated Child Development Scheme and the Rural Women's Development and Empowerment Project.

There has also been active policy interventions by individual Asian countries to tackle the problem of child labour. A central theme in such interventions has been an attempt, via legislation such as compulsory schooling or incentives such as school enrolment subsidy, to keep children in school and away from work. For example, the "Food-for-Education" (FEE) program in rural Bangladesh aims to keep the children of poor rural families in schools by providing households with free monthly food rations as long as they send their children to primary schools. In a study of the effects of the FEE program in Bangladesh, Ravallion and Wodon (2000) found that "the subsidy increased schooling by far more than it reduced child labour" (p. C158). The mid day meal programme in India[19], which dates back to 1925, was formally relaunched as the "National Programme for Nutritional Support to Primary Education" (NPNSE) on 15 August 1995 by the government of India as a centrally sponsored scheme designed to: (i) enhance the nutritional status of children and (ii) boost the

[18] See Fallon and Tzannatos (1998) for a lucid discussion of The World Bank's role in controlling child labour.
[19] See the recent collection of papers in the volumes edited by Ramachandran and Massun (2002) and Kabeer, Nambissan and Subrahmanian (2003) for a detailed account of several of the initiatives undertaken in India to reduce child labour.

universalisation of primary education by encouraging the economically disadvantaged families to send their children to school and ensure that they attend regularly. However, with the exception of the South Indian State of Kerala, India has not matched the performance of the Asian countries Sri Lanka, China, South Korea and Taiwan in promoting child education. As Weiner (1991, pgs. 178-179) notes, "in all four countries, in Kerala, and in other countries that have achieved high levels of school enrolment and correspondingly low levels of child labour, substantial financial commitments have been made to primary school education, sometimes with higher educational expenditures than in India but often with a higher proportion of the education budget devoted to primary-school education".

In conclusion, let us remind the reader of two distinctive characteristics of Asian child labour that distinguish it from the child labour seen elsewhere: (a) a large part of Asian child labour is in the form of child domestic workers and (b) the bulk of Asian child labour is in the child age group 10-14 years. Both these regional characteristics need to be explicitly recognised for the policy interventions to eliminate child labour to be effective. The child domestic workers undergo some of the "worst forms of child labour" and should be specifically targeted in the "time bound programmes" started by the ILO-IPEC in Nepal and other Asian countries. On the latter feature, as the case of Thailand analysed in Fallon and Tzannatos (1998, p.17) shows, while children below the age of 12 are pulled out of school because of the direct costs of education rather than the need for work, at older ages (12-15 years) the need for income becomes more important. Hence, while measures such as enrolment subsidy, mid day meals, etc. are useful, they will not make a big dent to the problem of older aged children dropping out of schooling in favour of employment. To keep the older aged children away from work and in the schools, the authorities need to embark on a large scale poverty alleviation program and target income support, food subsidy and other economic measures at disadvantaged families with children in the high risk age category of

10-15 years. Simultaneously, where legislative measures are in force, one needs to move beyond compulsory primary schooling and introduce compulsory secondary schooling aimed at the older aged children. Also, the quality of schooling and access to schools need to be enhanced significantly, especially in the rural areas.

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(note: the following are all available on the ILO website, www.ilo.org)

(1) *IPEC Country Profile: Nepal*

(2) IPEC Time Bound Programmes for the Eradication of the Worst Forms of Child Labour.

(3) *IPEC in Action: Asia – ILO-IPEC Programme in The Philippines*.

(4) *Report on Child Labour in Cambodia*, 1996 (Phnom Penh, July, 1997).

(5) *Summary Results of Child Labour Survey in Pakistan*, 1996 (Islamabad, October, 1996).

Table 1 Regional Estimates of Economically Active Children Aged 5-14 years in 2000

Region	Number of children (in millions)	Participation Rate (%)	Regional Share of Child Workers (%)	Regional Share of Child Population (%)
Developed Economies	2.5	2.0	1.18	10.26
Transition Economies	2.4	4.0	1.14	4.92
Asia and the Pacific	127.3	19.0	60.33	54.98
Latin America and the Caribbean	17.4	16.0	8.25	8.92
Sub Saharan Africa	48.0	29.0	22.75	13.58
Middle East and North Africa	13.40	15.0	6.35	7.34
Total	**211.00**	**18.0**	**100.00**	**100.00**

Source: ILO (2002)

Table 2: Estimates of Economically Active Children aged 5-17 years, in Asia/Pacific and Sub Saharan Africa in 2000 by Age Group

Age Group and Region	Number of children (in millions)	Participation Rate (%)	Regional Share of Child Workers (%)	Regional Share of Child Population (%)
5-9 years				
Asia/Pacific	40	12.3	54.64	54.99
Sub-Saharan Africa	20.9	23.6	28.55	14.55
Total (World)	73.2	12.00	-	-
10-14 years				
Asia/Pacific	87.3	26.5	63.35	55.01
Sub-Saharan Africa	27.1	21.5	19.67	13.03
Total (World)	137.8	22.99	-	-
15-17 years				
Asia/Pacific	86.9	48.4	61.94	54.07
Sub-Saharan Africa	18.1	35.0	12.90	12.14
Total (World)	140.30	42.26	-	-

Source: ILO (2002)

Table 3[(a)]: Labour Market Participation Rates of Children aged 10-14 years in Selected Asian Countries[(b)]

Country	Per Capita GNP at PPP (1999 $)	1980	1999
Republic of Korea	14637	0	0
Malaysia	7963	8	3
Thailand	5599	25	14
Philippines	3815	14	6
China	3291	30	9
Sri Lanka	3056	4	2
Indonesia	2439	13	9
Papua New Guinea	2263	28	18
India	2149	21	13
Pakistan	1757	23	16
Vietnam	1755	22	7
Bangladesh	1475	35	29
Mongolia	1496	4	2
Cambodia	1286	27	24
Nepal	1219	56	43

(a) Source: World Bank (2001)
(b) The countries have been arranged in descending order by their per capita GNP (1999 PPP $)

Table 4[(a)]: Labour Market Participation Rates of Children Aged 10 - 14 years in Selected African Countries[(b)]

Country	Per Capita GNP at PPP (1999 $)	1980	1999
South Africa	8318	1	0
Botswana	6032	26	15
Namibia	5369	34	19
Zimbabwe	2470	37	28
Lesotho	2058	28	21
Ghana	1793	16	13
Guinea	1761	41	32
Cameroon	1444	34	24
Senegal	1341	43	29
Uganda	1136	49	44
Congo	897	27	26
Kenya	975	45	40
Benin	886	30	27
Chad	816	42	37
Mozambique	797	39	33
Mali	693	61	52
Zambia	686	19	16
Ethiopia	599	46	42
Malawi	581	45	33
Tanzania	478	43	38
Democratic Republic of Congo	NA	33	29
Rwanda	NA	43	41

(a) Source: World Bank (2001)

(b) The countries, except for Democratic Republic of Congo and Rwanda, have been arranged in descending order by their per capita GNP (1999 PPP $).

Table 5: Descriptive Statistics for Rural Children Aged 6-15 Years and their Households in Vietnam

	1992/93	1997/98
Child Attributes		
Age	10.34	10.67
Female	0.49	0.48
Child labour indicator	0.60	0.48
Hours in the Last week	13.23	9.83
Household/Community Attributes		
Ln (Rice Price)	0.92	1.19
Net Production (households with annual land)		
Mean	1.43	
10^{th} Percentile	-0.50	
25^{th} Percentile	0.06	
Median	0.73	
75^{th} Percentile	1.68	
90^{th} Percentile	3.59	
Ln (Total Annual Land holdings)		
Mean	8.19	
10^{th} Percentile	7.23	
25^{th} Percentile	7.81	
Median	8.22	
75^{th} Percentile	8.70	
90^{th} Percentile	9.23	

Notes: Sample restricted to children aged 6-15 years in rural households in communes visited in both survey rounds. All means weighted to reflect sample design. Net production and total landholdings are based on 1992/93 data. Net rice production is in 1000s of kg in last 12 months. Rice prices are deflated by the monthly national consumer price index to be in 000s of Jan 98 Dongs.

Source: Edmonds and Pavcnik (2003, Table 1).

Table 6: A Comparison[(a)] of Child Work and Enrolment Rate by Age between Cambodia, Philippines and Vietnam

Age	School Only			School and Work			Neither School Nor Work			Work Only		
(Boys)	**Cambodia**	**Philippines**	**Vietnam**	**Cambodia**	**Philippines**	**Vietnam**	**Cambodia**	**Philippines**	**Vietnam**	**Cambodia**	**Philippines**	**Vietnam**
12	0.37	0.76		0.54	0.17		0.03	0.04		0.06	0.03	
13	0.28	0.72	NA	0.61	0.18	NA	0.02	0.04	NA	0.09	0.06	NA
14	0.28	0.64		0.57	0.19		0.03	0.05		0.12	0.12	
(Girls)												
12	0.32	0.84	0.66	0.59	0.11	0.25	0.02	0.04	0.05	0.07	0.01	0.05
13	0.29	0.81	0.60	0.59	0.11	0.26	0.02	0.05	0.04	0.10	0.03	0.10
14	0.24	0.74	0.52	0.52	0.14	0.25	0.03	0.08	0.08	0.21	0.05	0.15

(a) Sources: Ray and Lancaster (2003), Rosati and Tzannatos (2000).

Table 7[(a)]: Principal Reasons for the Child Working as Reported by Adult and Child Respondents in Cambodia

Reason	Adult Respondents (%)	Child Respondents (%)
Household Poverty	44.79	45.41
Supplement Household Income	23.86	23.11
Pay Off Outstanding Debt	0.29	0.20
Assist in Household Enterprise	26.74	25.85
Gain Experience	2.34	2.82
Pay for Schooling	1.05	1.23
Start Own Business	0.17	0.23
Education Program is Not Suitable	0.15	0.28
School/Training Institutions are Too Far	0.11	0.06
Other Reasons	0.50	0.82

(a) Source: Cambodian Child Labour Survey, 2001.

Table 8[(a)]: Preferred Choice as Reported by Adult and Child Respondents in Cambodia

Preferred Choice	Adult Respondents (%)	Child Respondents (%)
Going to School Full Time	24.17	21.11
Working for Income Full Time	8.48	9.54
Helping Full Time in Household Enterprises	2.23	1.61
Working Full Time in Household Chores	2.66	2.39
Going to School part time and working part time	6.77	7.02
Part Time in Household Enterprise	0.66	0.65
Part Time in Household Chores	2.52	2.52
Complete Education/Training	34.15	34.44
Full/part time skill training	6.15	6.35
Find a better job than the present	6.48	7.40
Want to do same work	1.75	2.25
Public Leader	2.40	2.99
Others	1.59	1.71

(a) Source: Cambodian Child Labour Survey, 2001.

Table 9: Regression Coefficient Estimates[a] of SAGE: Cambodia[d]

Variable	IV[e], [f]	OLS[e], [g]
Age of child	66.36[c] (24.04)	30.84 (16.42)
(Age of child)^2	-2.40[c] (0.92)	-1.08 (0.63)
Number of children in the household	-1.51[c] (0.31)	-1.89[c] (0.22)
Gender of household head (1 = male, 0 = female)	5.14[c] (1.49)	2.82[c] (1.01)
Age of household head	-0.13[c] (0.05)	-0.109[c] (0.035)
Gender of child (0 = girl,1 = boy)	-2.22[b] (0.87)	-1.58[c] (0.60)
Education level of most educated male adult	1.25[c] (0.14)	1.80[c] (0.09)
Education Level of most educated female adult	1.74[c] (0.14)	2.14[c] (0.10)
Work hours	-4.40[c] (0.37)	-0.194[c] (0.050)
(Work hours)^2	0.077[c] (0.007)	-0.0007 (0.001)
	Test for H_o: Difference in coefficients is not systematic $\chi^2_1 = 290.62$[c]	

(a) Figures in brackets are standard errors.
(b) Statistically significant at 5% significance level.
(c) Statistically significant at 1% significance level.
(d) Number of observations = 6318
(e) F-tests for Joint Significance: IV: F(10,6307) = 126.00[c], OLS: F(10,6307) = 236.95[c]
(f) IV: Root MSE = 34.452
(g) OLS: $R^2 = 0.2731$, $\bar{R}^2 = 0.2719$, Root MSE = 23.711

Source: Ray and Lancaster (2003)

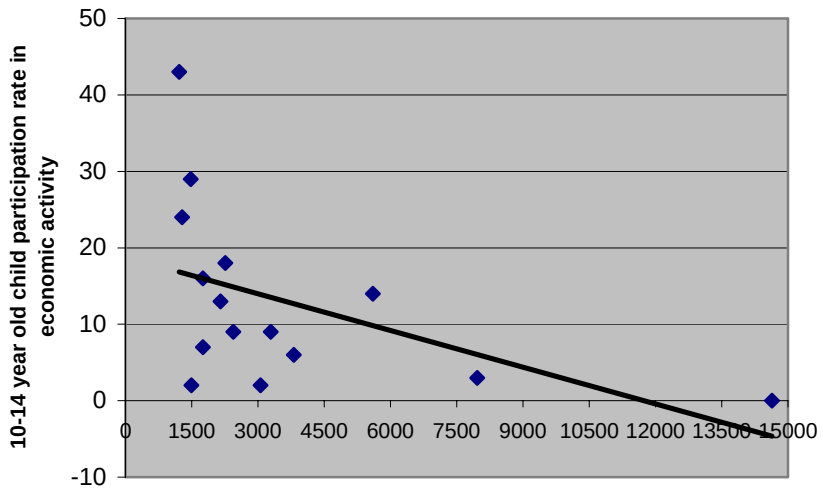
Table 10: Regression Coefficient Estimates[a] of the Child's Ability to Read and Write: Cambodia[d]

Variable	IV[e], [f]	OLS[e], [g]
Age of child	0.460 (0.237)	0.367 (0.231)
$(\text{Age of child})^2$	-0.016 (0.009)	-0.013 (0.009)
Number of children in the household	-0.013[c] (0.003)	-0.014[c] (0.003)
Gender of household head (1=male, 0=female)	0.064[c] (0.015)	0.058[c] (0.014)
Age of household head	-0.0005 (0.0005)	-0.0004 (0.0004)
Gender of child (0=girl,1=boy)	-0.013 (0.009)	-0.011 (0.008)
Education level of most educated male adult	0.010[c] (0.001)	0.011[c] (0.001)
Education Level of most educated female adult	0.015[c] (0.001)	0.016[c] (0.001)
Work hours	-0.012[c] (0.004)	-0.0015[b] (0.0007)
$(\text{Work hours})^2$	.0002[c] (.0001)	-0.00003 (0.00001)
	Test for H_o: Difference in coefficients is not systematic $\chi_1^2 = 10.00$[c]	

(a) Figures in brackets are standard errors.
(b) Statistically significant at 5% significance level.
(c) Statistically significant at 1% significance level.
(d) Number of observations = 6318
(e) F-tests for Joint Significance: IV: $F(10,6307) = 65.45$[c], OLS: $F(10,6307) = 67.15$[c]
(f) IV: Root MSE = 0.34011
(g) OLS: $R^2 = 0.0962$, $\bar{R}^2 = 0.0948$, Root MSE = 0.33379

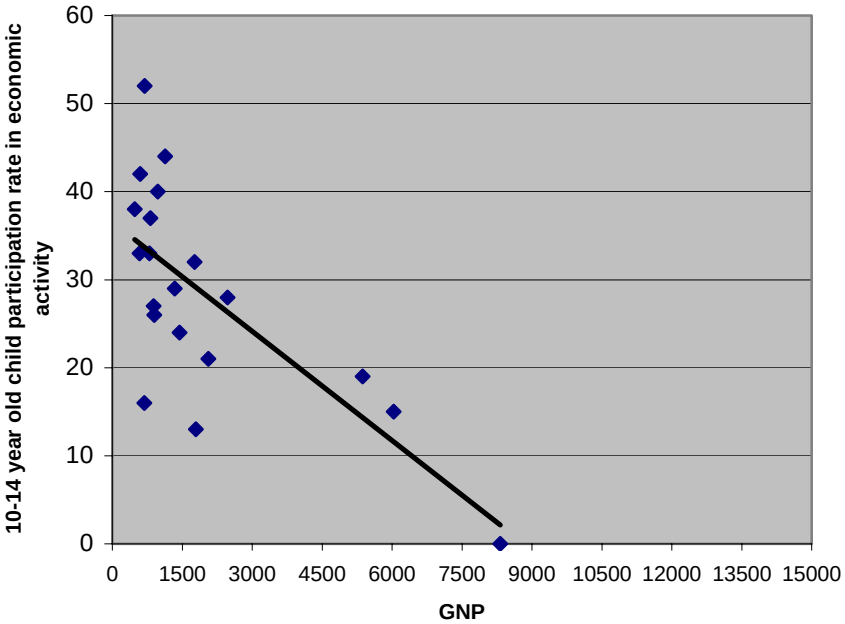
Source: Ray and Lancaster (2003)

Fig. 1: GNP v 10-14 year old child participation rate in economic activity in selected Asian Countries



Source: World Development Report, 2000/2001

Fig 2: GNP v 10-14 year old child participation rate in economic activity in selected African Countries



Source: World Development Report, 2000/2001

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