

ILO/IPEC Working Paper

Child labour in the developed economies

by

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Geneva

January 2001

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The views and interpretations in this report are those of the author and do not necessarily reflect those of the ILO.

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1. Introduction

Few issues have received more attention in recent years than child labour. It has been the focus of a great many conferences and activist campaigns, while a flood of books, articles and reports offers more information and analysis than even the most dedicated reader can keep up with. Virtually all of this attention, however, is directed toward child labour in developing countries; its favoured images are of children hooking rugs or stitching footballs in Pakistan, pulling fabric through sewing machines in Guatemala, or servicing the infamous child-sex tourism trade in southeast Asia. This report, on the other hand, focuses on the role of working children in the *developed* countries, a much less-studied topic. While I would not claim that the problems stemming from the exploitation of children are anywhere near as great in extent or seriousness in the world's wealthier regions, they are nevertheless real and need to be better understood.

There are two reasons to examine the situation of working children in the developed world. First, by no means have all the historical problems associated with child labour been solved in these countries. Workers under the age of 18 play an essential economic role in most of the developed world, and no country has been successful in protecting them from physical, social, or economic harm. In particular, at least two of the "worst forms" of child labour as enumerated in ILO Convention No. 182, hazardous work and prostitution, remain relatively widespread. More generally, it can be said that official data does a poor job of conveying the extent of child and youth employment or its content, and illegal child labour exists everywhere. A few countries have begun to take the problems of surveillance and enumeration more seriously, but, as we will see, much more remains to be done.

The second reason is that the record of the developed countries provides important evidence for hypotheses that guide policy in the developing world. Is child labour an issue that should wait until countries attain a certain level of economic development? The wealthier regions of North America, Europe, and the western Pacific have evidently achieved this development, but they continue to have problematic forms of child labour. Is the availability and requirement of education the solution? Schooling is generally available and mandatory in the developed countries, but this has not eliminated inappropriate child work—even during the school year. Do developing countries need stricter laws or more stringent enforcement? With a few notable exceptions, the legal context in the developed world is in conformity with ILO mandates, and governments have at least the potential capacity to implement their laws, but in this realm *illegality*, not legality, is the norm. These observations suggest that it is not sufficient to hold up the richer countries as role models for the poorer ones; rather, the shortcomings of the developed world may hold a different set of lessons for the developing world. While this report will not answer all such questions, it will offer an initial basis for asking and refining them. I hope it will spur the further research these questions deserve.

The report which follows is a survey of available data and analysis on the problems of working children in the United States, Canada, the European Union, Australia, New Zealand, and Japan. It is not exhaustive, because much of the relevant literature is nationally dispersed — published

in the language of each individual country, in its own nationally-distributed and -indexed journals, etc. Gathering and translating all of this information would be beyond the scope of this project. Instead, I have based this report on internationally-accessible material (indexed in global book and periodical indexes, made available by international organizations, or posted on indexed websites). It is biased toward sources in English and data from the United States in particular. Above all, it included no new field research, although by juxtaposing previously separate pieces of research, I hope it sheds new light.

The outline of the report is as follows: Section 2 will provide the context for the study of child labour in the developed world and consider how the main terms should be defined. Section 3 looks at the prevalence of this labour in light of official data, independent research, and the uncertainties stemming from illegal practices. Section 4 focuses on hazardous work as indicated by injury data and the types of jobs held by minors. Section 5 takes a closer look at two populations at particular risk, rural youth employed in agriculture and the problems faced by migrant and ethnic minority children. Section 6 considers the problem of child prostitution, a “worst form” of child labour found in Convention 182. Incidentally, two other worst forms, drug trafficking and armed conflict, will not be addressed in this report, for reasons of lack of data and lack of applicability respectively.¹ Section 7 concludes by summarizing the main findings of the report and returning to the policy questions that have emerged in the global debate over child labour.

2. The historical and analytical context

Although “child labour” as a social issue emerged as a consequence of the industrial revolution, children have always worked. They carried out tasks in the home, participated in agriculture, and learned crafts from an early age. This activity was taken for granted, and there were no debates over whether children should play a role in the economy. All of this changed with the recruitment of children for industrial production beginning with Britain in the eighteenth century.² The situation of children in British mines and textile mills was the target of several Parliamentary investigations in the early nineteenth century, and the plight of youthful chimney sweeps—young children who cleaned the inside of coal-burning chimneys, in the process acquiring serious respiratory diseases—challenged the conscience of the country. Over time, legislation was introduced which gradually outlawed many of these activities, beginning with the introduction of Half-Time Working in conjunction with the Factory Acts of 1833 and 1844. The purpose behind this system was to restructure child labour so that it no longer interfered with education. (Hobbs and McKechnie, 1997) Beginning with the Education Act of 1918, regulation sought the removal of all younger children from the labour force; this approach was extended by the Young Person’s Act of 1933, in which embodied the modern approach of age limits and hazardous orders.³ Nevertheless, there has been a debate surrounding how consequential these legislative actions really were. On the one hand, many children continued to engage in economic activities prohibited under law, and inspectors either failed to recognize infractions or they turned a blind eye to them. (Hobbs and McKechnie, 1997) On the other, while the prevalence of child labour in Britain certainly declined over the span of the nineteenth and twentieth centuries, many scholars have tended to downplay the role played by legislation compared with other changes in society. Some, such as Fyfe, believe that the increasing availability of education and the greater importance attached to it by most British families, was the primary factor at work. Others, such as Nardinelli, hold that rising family income encouraged families to withhold their children’s labour. (Nardinelli, 1990) Unraveling these factors is difficult since they were contemporaneous and deeply interrelated.

British experience was echoed by other industrialized countries, although each has a distinctive history. (Cunningham and Viazso, 1996) Early years of industrialization were accompanied by an important role for children in the factory workforce, although in some countries, such as Japan, this participation was muted by the cultural value attached to children’s freedom to play. Eventually, public concern for the welfare of children was aroused and protective legislation enacted. The parallel forces of emerging mass education and rising incomes also played their part. To some extent, all of these countries have tended to converge on a new pattern of youthful employment, which is the subject of this report. Although the problems of the past have not been fully eradicated, it is fair to say that, until recently, public opinion in most of the developed countries regarded child labour as a topic for the history books, and there was no systematic attempt to monitor the economic activity of children.

Before turning to the changing perceptions of children’s employment, it will be helpful to consider for a moment the factors that are thought to have contributed to its economic

prominence. Broadly, we can divide these into “supply-side” and “demand-side”. Most of the discussion focuses on the first of these. Here the question is, why did so many families send their children to work? Among the answers given have been:

- \$ poverty: families needed the extra income that their children could bring in;
- \$ culture: employment was viewed as positive for the social or personal development of the child;
- \$ training: children were thought to acquire useful on-the-job training that would improve their future prospects;
- \$ low opportunity cost: the main alternative to work (other than play) was education, but either educational opportunities were not readily available, or it was thought that children would not benefit as much by education as they would by work;
- \$ parental exploitation: some parents might use the labour of their children for their own gain, without considering the interests of the child.

All of these considerations still apply to developed countries; in addition, in recent years there has been more attention given to the agency of children themselves. Children are acquiring more independence at younger ages, and this applies to work decisions as well as other personal matters. The teenage consumer market has become a sought-after “demographic” by sellers, but this implies teenage access to disposable income. For most, this means at least some paid employment.⁴

Less attention has been given to the demand side, but it is surely just as relevant. The industrial revolution is said to have placed a premium on the nimble fingers of children, as machines fulfilled the functions of brute strength. In general, of course, it is also possible to pay children less, and this is thought to have provided a sufficient motive for businesses to employ them. Still, it is reasonable to suppose that children will be less productive at some tasks than adults, and much therefore depends on the way employers organize the work process. As we will see, certain types of jobs have come to be seen as “youth work”, but the list is not quite the same everywhere, and in some instances it includes activities that, objectively viewed, are wholly inappropriate for children. From this perspective, the issue of child labour raises questions about the way different societies structure their work, such that adult attributes are more valuable or less.⁵

It is essential in any study of child labour to be as clear as possible about what it is we seek to avoid or minimize. As mentioned above, children have worked for millennia, but it is only in the last hundred years or so that this work has been seen as problematic. The ILO’s 1919 Constitution considered already of special and urgent importance ‘the abolition of child labour, and the imposition of such limitations on the labour of young persons as shall permit the continuation of their education and assure their proper physical development.’ (article 41) Over

time, the method preferred to achieve the abolition of child labour has been to persuade countries to set a legal minimum age for admission to employment in various economic sectors, and to properly enforce these national standards. No attempt was ever made to operate starting from a watertight definition of child labour, to avoid that controversies over terminology - beset as they are with cultural bias - would eclipse the underlying universal values. The first ILO Convention encompassing all economic sectors did not change this approach. The Minimum Age Convention (No. 138), adopted in 1973, offers plenty of opportunity to ratifying countries to tailor application to differences in national capacity, and limits its prescriptions to a set of minimum age benchmarks. The Convention only lifts part of the veil hanging over the notion of child labour by suggesting that young persons should not be admitted to employment before having reached 'the fullest physical and mental development' (Article 1), while admitting different views of countries on what constitutes such development, and acknowledging that not all countries would immediately be capable of raising the minimum age to that level.

In all of this, Convention No. 138 recognizes the role of work in the development of children. First, work done in schools is exempt from any age limit, provided a number of safeguards are applied to ensure that the flag of education does not cover a cargo of exploitation. Secondly, apprenticeships or other forms of work whereby children gain experience on the shopfloor are allowed from 14 years onwards, irrespective of the prevailing minimum age in the country, but again provided certain safeguards.

In the wider context of ILO standards and values, there is room for contemplating the 'fullest physical and mental development' as a measure of the capability of carrying out productive and freely chosen employment (the language of the ILO's Employment Policy Convention (No. 122), 1964, or in more contemporary terms 'decent work'. In essence, this is work which satisfies a worker's human aspiration for material well-being and personal development, and adds value for society. In short, by keeping up the fight against child labour, girls and boys are given the opportunity to prepare themselves to become adults, capable of staving off poverty and pursuing decent work in an increasingly global economy in which the competitive pressures are mounting. In fact, it is the World Summit for Social Development in its attempt to formulate an effective response to the problems of poverty, unemployment and social exclusion, which lifted the elimination of child labour to the rank of fundamental principle of the world of work : child labour may be caused by poverty, but it certainly breeds poverty, particularly where it interferes with education. Education which increases a child's learning capacity is key to the girl or boy's empowerment and employability later, whatever her or his future economic role. Without a fundamental policy option favouring quality education over premature work the chances that economic growth ensures 'equity, social progress and the eradication of poverty' are seriously compromised in the longer term. It is for this reason that the ILO Declaration of Fundamental Principles and Rights at Work declared the effective abolition of child labour part of the "social floor" of the global economy.

Confronted with the complexity and the magnitude of the child labour challenge, the ILO recently added focus and decided that the worst forms of child labour, in fact those degrading

forms of child labour that most surely breed poverty, needed to be prohibited and eliminated as a matter of priority. The narrower scope of the Worst Forms of Child Labour Convention (No. 182), 1999 allowed a more precise definition of the forms of child labour the Convention is concerned with, and a more straightforward demarcation of the persons who stand to benefit (i.e. all children who have not attained 18 years of age).

ILO Conventions Nos. 138 and 182, being universal in nature, restrict their explicit language to the bare minimum so as not to hamper the ratification by a wide and varied constituency because of disputes over relatively minor prescriptions. When one examines a set of countries sharing a greater number of cultural, social and economic commonalities, it is, therefore, not uncommon to find more detailed legal instruments governing their mutual relations. A good starting point when looking for explicit motives behind age restrictions when one is studying developed economies is, for example, the European Social Charter:

"With a view to ensuring the effective exercise of the right of children and young persons to protection, the Contracting Parties undertake:

1. to provide that the minimum age of admission to employment shall be fifteen years, subject to exceptions for children employed in prescribed light work without harm to their health, morals or education;
2. to provide that a higher minimum age of admission to employment shall be fixed with respect to prescribed occupations regarded as dangerous or unhealthy;
3. to provide that persons who are still subject to compulsory education shall not be employed in such work as would deprive them of the full benefit of their education;
4. to provide that the working hours of persons under sixteen years of age shall be limited in accordance with the needs of their development, and in particular with their need for vocational training;
5. to recognise the right of young workers and apprentices to a fair wage and other appropriate allowances;
6. to provide that the time spent by young persons in vocational training during normal working hours with the consent of the employer shall be treated as forming part of the working day;
7. to provide that employed persons of under eighteen years of age shall be entitled to not less than three weeks' annual holiday with pay;
8. to provide that persons under eighteen years of age shall not be employed in night work with the exception of certain occupations prescribed by national laws or regulations;

9. to provide that persons under eighteen years of age employed in occupations prescribed by national regulations shall be subject to regular medical control;

10. to ensure special protection against physical and moral dangers to which children and young persons are exposed, and particularly against those resulting directly or indirectly from their work." (Article 7, as cited by the Council of Europe, 1997)

This list of concerns, and other similar to it, can be distilled to a few general themes, most of which pertain to the current and future interests of the child:

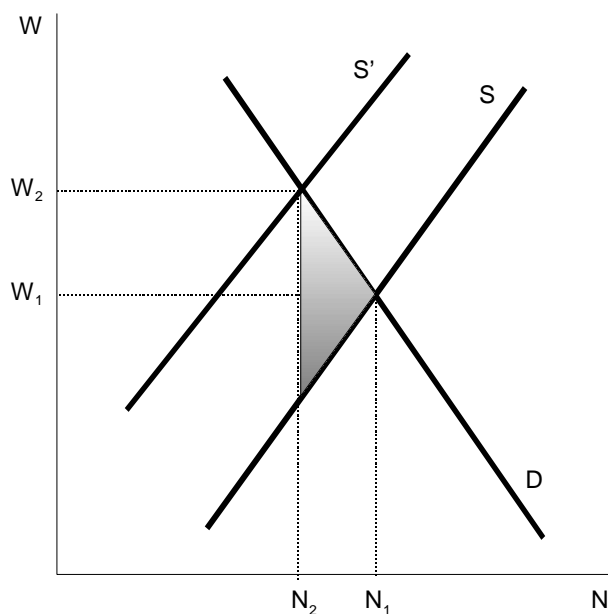
- \$ the risk of physical harm: children may be injured or made ill by their work, a problem exacerbated by their developmental susceptibility and by the possible lifelong consequences of poor health at a young age;
- \$ the threat to educational opportunity: excessive work may prevent children from attending school or may lower their performance in school, which is harmful to both them and the larger society that stands to benefit from their education;
- \$ the threat to healthy childhood experiences: the societies under study in this report generally value the freedom of children to play and explore, and work may impinge on this freedom either by taking away too much time or by prematurely exposing children to the harshest aspects of life;
- \$ the risk of exploitation: employers can typically pay lower wages to children and demand from them tasks that adults would refuse to perform.

The last of these helps explain why the issue of child labour became salient with the increasing employment of children outside the home: the notion that some people, already among the well-off (as factory owners), would further profit from the exploitation of children was viewed as intolerable. This hostility to exploitation is deeply ingrained and is justified, but it also has the potential, I believe, for creating a double standard: denying some forms of work in the context of paid employment, but permitting them in the home or family business. This, as we will see, has led to questionable outcomes in advanced economies.

While most of the opposition to (inappropriate forms of) child labour is protective in the above sense, seeking to shield the children themselves from excessive risks stemming from work, there is also a long tradition of opposition based on the effects child labour has on *adult* labour markets. (Cunningham, 2000; Newman, 2000) Undoubtedly, the leading role played by trade unions has drawn on these concerns. This perspective is controversial, and unions are sometimes criticized for being selfish in placing their own interests above those of children seeking employment. (Basu, 1999b) Nevertheless, it seems reasonable to ask whether children should ever work *in place of* adults. If restricting child labour would make it possible for more adults to

find work, these restrictions may be justified. If the issue is not employment but wages, the ethical case is comparable; the principle is that more income for children should not be earned at the expense of equivalent or greater adult income. But the argument is practical as well as ethical, since more work at an early age may mean less productive work later in life, as will be argued shortly. In other words, even though child labour may be a result of poverty, its suppression may be a weapon *against* poverty.

Since the relationship between child and adult employment is important in practice, it is worth a close look. One starting point would be that of conventional economics. Suppose that adults are more productive than children, but that each type of labour is paid exactly what it is worth (its marginal product). If the labour market clears at these wages, in the absence of any restrictions all adults and children whose opportunity cost of time (the value of what they could be doing instead of working) is less than their wage will find work, and the total income of society (value of production) will be maximized. Now suppose child labour is restricted. Some children who previously worked will be excluded from the market. Due to this, the prevailing wage for the remaining children will go up, and this will induce some employers to replace them with adults.⁶ Thus the demand for adults will increase, but not by as much as the employment of children decreased. This can be shown in highly simplified form in Figure 1.



In this diagram, adult and child workers are added together, based on counting children as a fraction of adults corresponding to the ratio of productivity and wages. (This is the same ratio; recall the assumption that wages are set by the worker's marginal productivity.) Thus the N axis measures the amount of effective labour, while W measures the wage corresponding to an adult unit of labour. If, for example, children were half as productive, it would take twice as many

children as adults to arrive at any given quantity of N , and their wage would be half of whatever the W might be for adult labour. The diagram is not explicit about the makeup of the labour force between adults and children, but it does tell us what we might be most interested in. If S represents the supply of effective labour and D its demand, then an unrestricted labour market would result in N_1 units of labour hired at a wage of W_1 . Some portion of this workforce would be children, and they would receive a fraction of W_1 corresponding to their productivity. Suppose a restriction on child labour is imposed, leading to a reduction in effective labour supply to S' . Employers would respond by reducing the number of workers hired by $N_1 - N_2$. (The number of children losing their jobs would be equal to $[N_1 - N_2]/R$, where R is the ratio of their productivity to that of adults; this will be a larger number than those removed from the market by the law itself.) This would lead to a wage increase from W_1 to W_2 (or R times this amount for children). Beneficiaries of these changes would include adults and children still employed, but children denied the opportunity to work would be the losers, as would consumers, who now have to pay higher prices for the goods they buy. (In such models employers earn no economic profits, and therefore neither win nor lose.) How do these effects compare to one another? The answer can be read from Figure 1, since (again by assumption) the D curve represents the value to society of the work performed, while the S curve represents the cost to workers of performing the work. The shaded area indicates lost benefits to society: potential employment denied for which the benefits in the value of goods that would otherwise be produced exceeds the cost to those who would have done the work. To put it bluntly, if a child wishes to work for a sum of money and can be paid more than this amount based on his or her ability to produce goods valued by consumers, how can it be advantageous to deny this opportunity? Here is the basis for some economists' suspicion of trade unions and other representatives of adult workers' interests: they may be trying to raise their own wages at the expense of the greater social good.⁷

Aside from its admittedly restrictive scope, how might the standard economic approach be criticized? For one thing, it assumes that, in the absence of any interference with the market, labour demanded and supplied will be equal, and no one will be unemployed against his or her will. In this case, there is no possibility that child labour takes the place of adult labour; on the contrary, it is assumed that any unemployment that might temporarily exist will disappear if wages are permitted to fall, and child labour may be helpful in that respect. A different approach to the problem of employment has been suggested by Keynes and his followers: in their view, it is the level of demand in the economy that governs the extent of employment. Markets alone cannot ensure that all workers will find jobs at the going wage rate; typically some will be unemployed involuntarily. A reduction in wages may not alleviate unemployment; it may even increase it if it leads to an offsetting loss in demand for goods and services. Thus, in a society with persistent unemployment there may indeed be a tradeoff between child and adult labour, just as some unions have claimed. Second, the standard economists' approach assumes that there is no differential exploitation of children — their wages are determined by their productivity in the same way adults' are. There are ample reasons to question this, since, for a variety of reasons, children are less able to bargain for their interests.⁸ If children are subject to greater exploitation, however, their labour raises issues of distribution — social justice — and not just economic efficiency. It is one thing to argue that children should work less so that adults can

earn more, another that the rewards of production should go to adult workers rather than the *employers* who exploit children.

Interestingly, Basu (1999a) attempts to justify the restriction of child labour even though he is willing to accept both assumptions disputed in the preceding paragraph. He does so by postulating that the willingness of families to permit children to work depends on their adult income. Thus, there may be two highly divergent equilibria in the labour market: one where adults are employed at relatively high wages and few children work, and another in which the large-scale participation of children has driven down the wages of their parents who then need the income of additional family workers. The purpose of a child labour regulation may be to guide the economy away from the second equilibrium and toward the first. Similarly, children who work may get less education and earn less in their later life, which requires their own children to work, and so on. Thus we could have one equilibrium of multigenerational child labour, or another in which children refrain from work, acquire an education, earn higher adult wages, and see to their own children's education. Again, a child labour law might have the effect of selecting the better equilibrium. These arguments are hedged by the recognition that they depend on a number of assumptions that may not hold, and, in any event, their mechanisms are difficult to identify and measure in the real world. What is most interesting for us about Basu's argument is that it implicitly accepts most of the analysis embedded in Figure 1 and therefore has to make great efforts to come to different conclusions. This is probably reflective of the current climate of debate, since few authors are willing to criticize child labour for its effects on adult workers. For the purposes of this report, however, I would like to keep the issue open, particularly as many developed countries are battling severe employment problems, and the implications of child labour for this question are likely to be significant.⁹

Against the background of these concerns, we can see why debates have flared over how to define the key term, "child labour". The "child" part has become somewhat less contentious, as governments standardize on a set of common distinctions incorporated in Convention No.138. This Convention specifies four, and it provides a framework for the analysis which follows. First, a distinction is made between general participation and nonparticipation in the labour force: in the developed country context, children must be at least 15 to engage in most jobs. A second identifies light work, which is unlikely to cause harm or interfere with education and can be made available to children as young as 13. A third pertains to work activities in the course of education or vocational training, for which the child must be at least 14. Finally, the Convention creates a separate category of work "likely to jeopardize the health, safety or morals of young persons" and specifies 18 as the minimum age at which it can be undertaken. Taken together, this framework may not resolve all the issues raised in the academic literature on childhood and work, but it has become normative for policy.¹⁰ In this report, I will use "child" or "youth" somewhat loosely to refer to anyone under the age of 18, sometimes substituting the less exact word "teenager" (which in principle would exclude the youngest children and include 18 and 19 year-olds).

A more difficult problem is posed by the word “labour”. There is a long tradition of social reform advocating the abolition of child labour, but this seems to be contradicted by the general acceptance of many forms of youth employment in modern societies. Indeed, the barriers to youth employment in Europe have been seen as a major social problem and have been the object of considerable research and advocacy. The response to this situation has not been a simple abandonment of the abolitionist position (or rhetoric), but instead a more nuanced definition of “labour” that distinguishes it from the “good” employment that teenagers need to be provided more of.¹¹ As a result, a new category of “child work” has arisen, which encompasses all economic activity by children, of which “labour” is a harmful subset. Hence Fyfe (1989): “Child labour is work which impairs the health and development of children.” (p. 4) Similarly the Encyclopedia of Social Sciences: “When the business of wage-earning or of participation in self or family support conflicts directly or indirectly with the business of growth and education, the result is child labour. The function of work in childhood is primarily developmental and not economical. Children’s work then is a social good, is the direct antithesis of child labour as a social evil.” (quoted by the International Working Group on Child Labour, itself quoted by Cecchetti, 1998)

This dichotomy has been sharply criticized by a number of authors. Several, such as White (1994) and Cecchetti (1998) reject the either-or approach it embodies; there is a continuum, they say, between more and less beneficial forms of work for children. McKechnie and Hobbs (1997) rightly point out that no such dichotomy is proposed for adults, and White questions the salience of age in such dichotomies altogether, arguing, “...the real problems of child and juvenile labour lie not so much in the age of young workers, as in the fact that young workers are often subject to exaggerated forms of labour control and exploitation over and above those faced by adult workers...” (p. 851) On the other hand, there are distinctive aspects to the problems children may face at work: the potential for conflict with education, the long-term developmental consequences of dangerous or degrading activities, and the incomplete achievement of agency children generally bring to work situations. Thus, there is a case for defining certain types of work as inappropriate for children and attempting to curtail them. (There is also a case for ameliorating as much of this work as possible, so that it can become appropriate for children.) Recognizing the strength of both sides in this debate, I will not adhere to a formal distinction between child labour and child work, but I will proceed with the understanding that some work activities of children should be encouraged, others abolished, and that there is a shifting middle ground that are cause for concern but can perhaps be remedied.¹²

3. The extent of child employment

How widespread is the employment of children under the age of 18 in the industrialized world? What do official statistics say — and how reliable are they? What kinds of jobs do children hold? How much of this employment is illegal? What factors play a role in determining the level of labour force participation by youths? In this section I will survey the available evidence on these questions.

There are different ways to measure the economic activity of youth. The broadest is “economically active”. This includes three subcategories, children who work at paid employment, children who work at unpaid employment (such as family businesses), and children who seek paid employment but are currently unemployed. To keep the analysis as simple as possible, I will focus primarily on the first group.

To begin, consider the numbers reported by international organizations, such as the ILO and the OECD. Both are based on data provided by national statistical agencies; each gives a different view. The OECD provides recent data on the percentage of 15-19 year-olds employed in member countries:

Table 1:
Percentage of 15-19 year olds in paid employment, 1998

Australia	45.6
Belgium	5.3
Canada	32.9
Denmark ¹	56.3
Finland	16.7
France	5.9

Germany	28.8
Greece ¹	8.8
Italy	11
Netherlands	49.3
Portugal	22.6
Spain	12.5
Sweden	16.9
Switzerland	19.8
United Kingdom	52.2
United States ¹	34.8
Mean, all OECD	26.2

1. Reference year is 1997.

Source: OECD (2000), <http://www.oecd.org/els/edu/eag98/Tables/E2.xls>

The ILO provides historical data and projected trends for younger and older groups of child workers:

Table 2:
Economic activity rates for 10-14 year olds, selected countries

	1950	1960	1970	1980	1990	1995	2000	2010
W. Europe	4.1	3.4	1.7	0	0	0	0	0
Austria	7.8	7	3.6	0	0	0	0	0
Belgium	4.2	3.1	0.6	0	0	0	0	0
France	5.4	4.2	2.6	0	0	0	0	0
Germany	3.4	2.8	1.1	0	0	0	0	0
Netherlands	4.9	2.6	1.7	0	0	0	0	0
Switzerland	0.9	0.4	0.2	0	0	0	0	0
Australia	2.7	1.6	1.2	0	0	0	0	0
New Zealand	0.3	0.1	0.1	0	0	0	0	0

Source: ILO (1997)

Table 3:
Economic activity rates for 15-19 year olds, selected countries

	1950	1960	1970	1980	1990	1995	2000	2010
W. Europe	72.2	65.7	53.1	41.7	29.5	27.4	25.3	20.7
Austria	83.4	77.7	62.8	58.1	49.5	45.7	41.7	33.9
Belgium	54.5	44.3	34	23.7	10.8	10.5	10.1	9.5
France	65.3	53	40.6	21.8	10.6	10	9.5	8.5
Germany	79.3	74.7	64.9	54.3	42.4	38.3	34.2	26
Netherlands	64.2	57.6	48.8	40.4	42.9	40.3	37.8	33
Switzerland	69.1	66.2	61.2	54.4	52.8	49	45.2	37.8
Australia	72.4	69.4	66.4	63.4	59.7	56.4	53.1	46.4
New Zealand	68.7	64.2	58.7	56.4	54	51.9	49.8	45.5

Source: ILO (1997)

A few comments are in order.¹³ First, there are very large reported disparities between developed countries—fully an order of magnitude between Denmark at the top and France and Belgium at the bottom in the OECD data. Second, all countries in Table 2 report the absence of measurable paid employment by children under 15. Third, all countries report a trend toward lower rates of employment in the 15-19 year-old group. But how reliable are these numbers? At least two of these patterns are highly implausible. It is not conceivable that there should be such dramatic cross-national differences in labour force participation rates; surely these reflect

differences in measurement rather than practice. Also, it is unlikely that the countries in the ILO sample have entirely eradicated economic activity by 10-14 year-olds. Again, it can be presumed that these countries do not have a sufficient surveillance apparatus in place to identify the actual labour force involvement of these children. The universal time trend toward less youth employment may be correct, but we do not have enough evidence to be sure either way.

For deeper insight into questions of measurement we need to turn to individual countries. Some, in particular the United States, have generated a substantial literature on this topic due to public debate over the effects of child employment; others are just beginning to investigate.

United States of America

In 2000 the US Department of Labour issued a *Report on the Youth Labour Force* which contains the most complete presentation of official data yet made available. (US Department of Labour, 2000) I will summarize its main findings here.

There are two main sources of data, the National Longitudinal Survey of Youth (NLSY) and the Current Population Survey (CPS). Each is based on a household survey; CPS is a larger sample, but NLSY tracks cohorts over time and covers younger age groups, so each has its advantages. The Labour Department analyzes each dataset separately and then considers in detail how sampling differences may explain differences in results. I will not attempt to resolve discrepancies, but will simply report the evidence from each source.

Beginning with the NLSY and its most recent (1997) cohorts, it is important to note that the survey distinguishes between “employee” and “free lance” jobs. The first refers to more formal employment relationships in which the employer is a business; the second refers to less structured work, usually for other households, such as yard work and babysitting. The typical sequence is for young people to begin in freelance work and then graduate to more conventional employment, but many jump into employee work immediately. By the age of 14, 43 per cent of the youths in the sample said they were engaged in freelance work and 24 per cent in an employee job. Due to overlap, a total of 57 per cent were employed in at least one of these. By age 15, 40 per cent were in freelance jobs, 38 per cent in employee jobs, and 64 per cent in at least one of the two. Remarkably, nearly half of all 12 year-olds reported working, mostly in babysitting or yard work. Clearly, the majority of American youth begin paid employment by the time they become teenagers or soon after. Employment rates are approximately equal for boys and girls, but boys are more likely to work in employee jobs.

The factors associated with youth employment are detailed in Table 4:

Table 4:
Employment percentages for US 14 and 15 year-olds

Sample	Any Job	Employee Job	Employee / All
While aged 14			
White	64.5	27.5	42.6
Black	43.3	16	37.0
Hispanic	41.3	16.7	40.4
<\$25,000	48.6	20.5	42.2
\$25,000 - \$44,999	62.7	25.5	40.7
\$45,000 - \$69,999	63	26.5	42.1
\$70,000 and over	63.5	25	39.4
While aged 15			
White	71.8	44	61.3
Black	43.6	22.2	50.9
Hispanic	47.9	26.5	55.3
<\$25,000	52.3	32.3	61.8
\$25,000 - \$44,999	70.9	40.8	57.5
\$45,000 - \$69,999	69.4	39.8	57.3
\$70,000 and over	75.6	42.2	55.8

Note that the second column reports the percentage in any job, the third the percentage in employee jobs, and the fourth the fraction of working youth in employee jobs.

Source: National Longitudinal Survey of Youth, 1997 (US Department of Labour, 2000)

In general, higher incomes are associated with greater participation. This would seem to contradict the view that children take jobs due to economic pressure on their families, although this may still be the case for many children in low-income households. Note that the lowest-income stratum, while least likely to work, is most likely to work in a conventional employment situation if employed at all. White children are substantially more likely to be employed than those classified as Black or Hispanic, and this holds equally for both types of jobs. The survey does not permit us to say whether this is the result of less inclination to seek work on the part of minority youth and their families, or whether their social and kin networks are less able to generate employment opportunities. In this context, it should be mentioned that foreign-born children have employment rates comparable to native-born minority children; here the role of less effective networks is surely considerable.

One of the main concerns concerning child labour is its potential to interfere with schooling. Table 5 indicates this is a potential problem for a small but noticeable segment of the youth labour force.

Table 5:
Hours of work during the school year, US 14 and 15 year-olds

Sample	Worked any hours	Worked >50% of school weeks	And averaged 15+ hrs/wk
While aged 14			
Total	18.4	9.3	3.6
Male	22.4	11.1	4.9
Female	14.2	7.4	2.2
White	22.1	11.6	4.3
Black	9.9	4	1.9
Hispanic	11.9	4.1	2
Less than \$25,000	15.2	6.3	3.4
\$25,000 - \$44,999	19.1	10.2	4.8
\$45,000 - \$69,999	21.7	11.4	3.9
\$70,000 and over	19	9.2	2.8
While aged 15			
Total	31.2	15.5	8.2
Male	34.5	18.3	9.9
Female	27.7	12.6	6.4
White	37.7	29.2	10.3
Black	15.3	6.3	3.1
Hispanic	20.5	7.4	3.9
Less than \$25,000	26.2	12	7.9
\$25,000 - \$44,999	32.5	16.8	11.2
\$45,000 - \$69,999	35.3	19.7	10.3
\$70,000 and over	35.8	17.7	7.5

Source: National Longitudinal Survey of Youth, 1997 (US Department of Labour, 2000)

The second column gives the percentage of each sample that worked at least some hours during the school year. The third reports the percentage that worked more than half of all weeks during

the school year, and the fourth indicates the percentage of the sample that worked more than half of all school weeks and averaged at least 15 hours of work per week. Here, the school-year employment rates show the same pattern as overall rates: more participation with higher income, and more participation by whites than by minorities. In addition, boys are more likely to work at some point during the school year than girls are. Once we turn to measures of intensity, however, the story shifts somewhat. The number of weeks worked and the number of hours worked per week exhibit an inverted U-shape over the four income categories: poorest and richest students work the fewest hours and weeks; those in the middle work the most. This suggests that, if the network hypothesis is correct, economic pressure (admittedly attenuated) may play a role in work intensity within the subsample of teenagers with access to jobs. No corresponding pattern of work intensity shows up with minority teenagers, however. Considering the evidence as a whole, are some of these students at risk of working to the detriment of their education? Researchers remain divided on the relationship between hours of work and school performance; the tendency for work hours to be correlated with other factors that may affect success at school makes it difficult to isolate this one connection.¹⁴ Nevertheless, with over one in ten teenagers putting in substantial work effort during the school year in many communities, it is probable that some are being stretched too far. Whether this is a matter for public intervention, of course, is a separate issue.

The NLSY asks questions that make it possible to identify the types of jobs most commonly held by teenagers. Table 6 lists a subset of jobs which respondents were mostly likely to say they held, when asked about the one job they held for the longest period of time.

Table 6:
Industries and occupations commonly identified among
longest-held jobs by US 14 and 15 year-olds

	14 All	14 Male	14 Female	15 All	15 Male	15 Female
Construction	8.4	11.4	3.8	5.3	8.3	
Agricultural production, crops	4.4	5.9	1.9	2	2.6	
Agricultural production, livestock	2.9	3.7		1.8	2.5	
Private households	4.1		8.6	1.5		3
Janitors and cleaners	8.7	9.4	7.5	5.5	6.9	3.6
Labourers (including construction)	8	10.6		7.3	10.3	

Source: National Longitudinal Survey of Youth, 1997 (US Department of Labour, 2000)

The six data columns segment the data by age (14 or 15) and sex (male, female or all). The rows are not mutually exclusive; they may refer to either industry or occupation. While the sexual division of labour is visible, it is interesting that cleaning and, surprisingly, construction cuts across gender barriers (although girls appear to be doing lighter work in construction). All of

these activities are potentially hazardous, however, a point to which we will return in the next section.

The second source relied on in the Labour Department report is the CPS, which does not sample anyone below the age of 15, but does have relatively large cells for age, industry, and occupation. Overall, youth employment rates are much lower in the CPS than the NLSY, as Table 7 demonstrates.

Table 7:
Employment percentages, US 15-17 year-olds

Age	During school year	During summer
15	9	18
16	26	36
17	39	48

Source: CPS, 1998 (US Department of Labour, 2000)

Since the CPS asks a single individual, generally a parent, to provide information on all members of the household, whereas the NLSY interviews teenagers directly, the NLSY is probably more accurate. Nevertheless, the patterns, if not the overall magnitude, revealed in the CPS shed light on the work activities of American teenagers. For instance, comparison of CPS data over time demonstrates that employment rates are strongly procyclical — far more so than adult rates — while there has been a long-term downward trend in youth employment since the late 1970s. (Rates were about 20% higher at the beginning of this period, and the decline has been about the same for each income bracket.) This trend corroborates the ILO cross-national time series discussed earlier in this section. As for work intensity, during 1996-98 youths aged 15-17 worked an average of 17 hours per week during school months and 23 per week in the summer. Not everyone in this age bracket is a student, however. High school dropouts average 34 hours per week during the school year; removing this group lowers the student average to 15 hours—still a substantial time commitment, however.¹⁵ As with employment rates, average hours are procyclical; there has been a slight downward trend over the past two decades in average hours worked during the summer, but not during the school year. Finally, in 1998 a majority of 15-17 year-olds earned \$5-6 per hour; the average was \$5.57. There has been a downward trend in teenage real wage levels since 1979, mirroring the trend for adults.

Table 8 presents information from the CPS about the changing industrial and occupational composition of youth employment in the US. Note that 1987-89 is used as the period of comparison for the occupational distribution, because the CPS changed its occupational codes in 1983.

Table 8:
Changes in the industrial and occupational composition of work by US 15-17 year-olds

Classification	Males	Females
Industry percentage, school months (1977-79 / 1996-98)		
Retail trade	48 / 60	49 / 63
Services	21 / 19	39 / 29
Mining, construction, manufacturing	16 / 9*	5 / 2
Agriculture	10 / 8	2 / 2
Industry percentage, summer months (1977-79 / 1996-68)		
Retail trade	35 / 48	41 / 55
Services	24 / 24	41 / 36
Mining, construction, manufacturing	18 / 10	5 / 3
Agriculture	15 / 12	5 / 3

Occupation percentage, school months (1987-89 / 1996-68)		
Precision production, operators, and transportation	9 / 7	2 / 2
Handlers and labourers	24 / 21	3 / 4
Farm, forestry, and fishing	10 / 9	2 / 2
Occupation percentage, summer months (1987-89 / 1996-68)		
Precision production, operators, and transportation	10 / 8	2 / 2
Handlers and labourers	23 / 20	3 / 4
Farm, forestry, and fishing	19 / 16	3 / 4

**Construction accounts for 3.6.*

Source: CPS, various years (Department of Labour, 2000)

Most work, for both teenage boys and girls, is concentrated in trade and services, with generally increasing frequency for boys and decreasing frequency for girls. Hazardous industries and occupations have become less common for boys; the trend for girls in this respect is mixed, although their employment in these types of jobs is infrequent.

One topic the Labour Department study does not address is the extent to which these data are consistent with US law under the Fair Labor Standards Act (FLSA), as well as appropriate state laws. Federal legislation imposes restrictions on the occupations open to workers under the age of 18 and has a more extensive list of prohibited occupations for those under 16; it also restricts the number of hours children under 16 are permitted to work during the school year. State laws sometimes include additional prohibitions, and they often impose hours limits on 16- and 17-year-olds during the school year. Kruse and Mahony (2000) matched the CPS and NLSY data to federal and state regulations to estimate the numbers and percentages of children working

illegally in 1996. Summing their findings, they concluded that, in an average week, approximately 150,000 youths under the age of 18 were working illegally in the US, and that 300,000 worked illegally at some point during the year. While large numbers, it should be borne in mind that this is still a relatively small percentage of all teenagers, or even of all working teenagers. (It represents approximately 7.5% of all employed 15-17 year-olds during the period 1996-98, according to CPS data.) On the other hand, these numbers are derived from official data, which in all likelihood understates the extent of child employment, legal and especially illegal. Table 9 provides more detail from this study.

Table 9:
Estimated illegal employment of US youth, 1996 (percentages of age group)

Age	Illegal paid work	Excessive hours	Hazardous occupation
12	21.5 - 49.6	0.8 - 0.1	
13	25.4 - 56.7	2.9 - 4.1	
14	26.8 - 55.6	0.6 - 5.0	0.1 - 0.8
15-17		0.3	0.5

Source: Kruse and Mahony (2000)

White teenagers were estimated to be working illegally at higher rates than any category of minority youth.

In addition to this matching exercise, Kruse and Mahony considered two additional potential sources of illegal work, sweatshops and home work.¹⁶ Extrapolating from New York City enforcement data, they estimated that, during an average week in 1996, 310 children were working illegally in US apparel sweatshops; for the year as a whole the corresponding figure was 550. These number are almost certainly lower-bound estimates, not only because of the inherent difficulty in identifying illegal sweatshops, but also because the rate of illegal to legal employment in New York, on which the authors relied for their extrapolation, is probably lower than the national average due to the presence there of a large, longstanding legal apparel industry.

A second possible source of illegal work is the involvement of the children's parents in home-based work. According to the May 1997 CPS, there are 76,000 non-managerial, nonprofessional parents who did at least some work at home for pay, and they have 122,500 children ages 5-14. 9300 of these parents are in apparel. How many of them surreptitiously employed their children in this work is impossible to know, however. In addition, it is likely that there are parents engaged in home work who have not reported it to the CPS. Since most work performed by children for family-owned business is legal under US statutes, Kruse and Mahony did not consider this as a potential source of illegal child labour, although nonagricultural family businesses must still shield children from hazardous activities. This may provide another source of downward bias to their estimates.¹⁷

In summary, data collected by US government agencies has been mined for the light it can shed on child labour practices. This data is extensive, although it most likely underestimates the true level of work activity. With a relatively lax regulatory structure, the US has low percentages, but significant absolute amounts, of illegal child labour. (There is no national permit system for child work in place in the US; this weakens the enforcement apparatus, but it also provides less inducement for workers or employers to evade the system.) Youth tend to be employed in the fast-growing service and retail sectors, but a substantial number are found in more dangerous lines of work, such as agriculture and construction. (See the following section.) The available evidence suggests that economic need is not a primary determinant of labour force participation, but it may play a role within specific populations.

Canada

As reported earlier in the OECD data, only about a third of Canada's 15-19 year-olds are officially listed as being in paid employment — approximately half the percentage in the US, whose economy it resembles in many respects. This suggests underreporting rather than nonworking as a likely cause. McKechnie and Hobbs (1998), in a general survey of the prevalence of child work, cite one 1991 study in which half the Canadian high school students sampled were in paid employment.

United Kingdom

While official statistics seem not as informative in the United Kingdom as they are in the US, there has been a resurgence of interest in child labour, leading to a number of helpful independent surveys. Table 10 appears as Table 2.4 (p. 33) in Hobbs and McKechnie (1997) and is based on their review of studies of youth employment conducted earlier in the decade.

Table 10:
Best estimates of child work in Britain from a sample of studies, 1991-96

% ever worked before leaving school	63-77
% working at age 15	36-66
% working at age 14	36-59
% working at age 13	34-49

% working at age 12	22.5-36.5
% working at age 11	15-26

Source: Hobbs and McKechnie, 1997 (p. 33)

These figures are roughly comparable to those of the US and slightly exceed the official data reported by the OECD (see Table 1 above). As part of their own research, these authors collected 14 samples of students in five regions of England and Scotland; their findings appear in Table 11, which appears as Table 2.8 (p. 36) in their book.

Table 11:
Rates of employment, British 14 and 15 year-olds

ever worked	66%
currently working at age 15	36%
currently working at age 14	49%

Source: Hobbs and McKechnie, 1997 (p. 36)

Again, these numbers are generally consistent with other studies, although they paradoxically show the employment rate declining with age. With respect to work intensity, they estimate that 16-24 per cent of British children at these ages are working 10 hours or more per week.

A more recent study is that of Middleton et al. (1998), which is based on a weighted sample of 230 children age 11 and above. Their findings are summarized in Table 12. The second column reports the percentage of each age group in paid employment; the third the percentage of this subgroup in formal employment.

Table 12:
Employment and formal employment among British children, 11 and older

Sample	% working	% in formal employment
All	36.2	57
11-12	18.2	38
13	26.3	72
14	41.2	65
15	55.1	57
16	52.0	53
Single parent	27.6	32
Two parent	42.7	61
On income support	32.7	43
Not on income support	37.3	60

Source: Middleton et al. (1998)

These results are consistent with those in the previous two tables, although it is anomalous that the share of formal employment peaks at age 13. It may be that the sample is too small to permit much confidence in these individual cells. The authors report that boys are more likely to be formally employed than girls; across both sexes the predominant activities are newspaper delivery, babysitting, retail, neighbourhood work, restaurant work, and washing cars. Interestingly, 14 per cent of working children have two jobs, and an additional 5 per cent have three.

One of the distinguishing characteristics of British research is its focus on the economic aspects of children's work, perhaps because of the agenda-setting efforts of the Low Pay Group, an academic research and advocacy network, in the early 1990s. In the data of Middleton et al. there is no evidence for economic pressure as a motivation for work; better-off children work more. The same pattern was found by Hobbs and McKechnie, and this is consistent with data from the US. Nevertheless, for children in low-income families employment can have a measurable impact on quality of life. In the Middleton et al. study, for instance, it was found that income from working children contributed an average of 6 per cent to the total incomes of families with single parents or those on income support.

It is possible to focus on this portion of the larger child labour force through the work of Leonard (1998), who interviewed 122 students aged 14-17 who live in a low-income neighbourhood in West Belfast, Northern Ireland. Of these, she found that 51 were in paid employment. The most common activities for boys were deliveries (13) and construction (6); for girls they were shops (9) and cafés and restaurants (6). Three students in her sample worked more than 20 hours per week during the school year, and five said that their families depended on their earnings. Wages were low, in some instances less than 50p per hour, particularly when children worked for members of their extended family. In part this may be due to their failure to invoke minimum wage and other protections: "None of the pupils I interviewed were aware of any legislation governing their employment." (p. 88)

Another reason why child workers may not invoke the statutes is that they are working, knowingly or not, outside the law. Illegal work seems widespread in Britain, which has a permit system that, in principle, requires the registration of each child worker. Hobbs and McKechnie (1997) found that "the overwhelming weight of the evidence" indicated that the majority of child employment is illegal. Rikowski and Neary (1997) cite a 1995 survey by the General and Municipal Boilermakers Union which found rates of registration for child workers to vary between 52 and 2 per cent. Gardiner (1995) cites another survey of 1600 London secondary students. 41 per cent of these had jobs of which fully 78 per cent were illegal. Incidentally, the article's title refers to jobs held by schoolchildren that began before 7:00 a.m. On balance, the judgment of Hobbs and McKechnie appears correct, but note that illegal work can be either work that violates national labour standards or work which is not properly registered and therefore of uncertain compliance. By the nature of this uncertainty, it is not possible to divide illegality neatly into "procedural" and "substantive" categories — which, of course, points to the initial purpose of the registration system.

The Netherlands

Although documentation is sparse, it is likely that the official statistics cited for the Netherlands in Tables 1-3 are understated. White (1994) mentions a 1987 survey conducted for the Ministry of Social Affairs encompassing 20 schools and a sample of drop-outs which found that 3/4 of all children between 13-17 were working for money, and that, of these, 3/4 were working illegally. The average workweek was found to be 17.5 hours. Similar allegations of widespread illegality

were made by the National Federation of Christian Trade Unions, according to McKechnie and Hobbs (1998).

Germany

Germany reports a relatively low rate of youth employment, but it is not known how many German teenagers work outside the systems of enforcement and enumeration. One survey of 2500 high school students in Thüringen, for example, found 37 per cent in employment and 24 per cent in violation of the minimum age laws. (German Bundestag, 2000) It should be noted, however, that this survey, although recent, was conducted in a former GDR state, and the labour market probably remains unsettled. No comparable information for a western labour market is available. The recent report of the Bundestag views existing data on child work to be unreliable but offers no indication of how great the discrepancies may be.

France

Official statistics are provided by Institut National de la Statistique et des Etudes Economiques (INSEE). In 1998 they estimated 129,155 paid workers under 18, a total of 0.65% of the labour force. While this total appears to be substantially less than the true rate of activity, the sectoral composition may be more accurate; it appears in Table 13.

Table 13:
Share of workers under 18 to the share of the total labour force, France

Industry	Relative share
Food and agriculture	4.3
Construction	2.8
Automobile sales and repair	4.3
Hotel and restaurant	3.6

Source: Ministère de l'Emploi et de la Solidarité, République de France (1998)

An additional 120,000 youths were identified as apprentices, and there were an estimated 11,000 pre-apprentices, mostly between the ages of 15-16. In agriculture, approximately 10,000 youths were reported working during the summer of 1997 from a few days up to one month.

Interestingly, INSEE reports data on permits for youth employment in the fashion and entertainment industries. While this work takes place in all countries, few have registries that provide an indication of its dimensions — but France does. In Paris, in 1998, there were 15 agencies licensed to hire children as fashion models. Between them, approximately 13,500 were employed, but only about 20% of these on a regular basis. 5268 permissions were granted for children to perform professionally in entertainment in Paris that year, with several hundred more in other regions of the country. Because of this unique data source, France may be an

appropriate location for future research in the situation of young, and sometimes very young, workers in this sector.

Scandinavian region

Denmark, as we saw earlier, is the “winner” among countries ranked for youth employment in the OECD data set; if anything, however, its official numbers are likely to understate the true level of children’s labour force participation. Frederiksen (1999) cites a 1993 study by the Danish National Institute of Social Research that found significant participation by children as young as ten. Table 14 summarizes these data:

Table 14:
Children’s labour force participation in Denmark, 1993

Group	% working
10 year-olds	7
12 year-olds	18
14 year-olds	43
15 year-olds	59
16-17 in basic vocational courses	44
16-17 in lower secondary school	64
16-17 in upper secondary school	70
overall	40

Source: Frederiksen (1999)

Note that the overall participation rate of 40 per cent applies to the entire age group, 10-17. As with Britain and the United States, a majority of teenagers begin working by the age of 15. 35 per cent of all young workers in this study were reported as having permanent jobs; the majority worked between 1-10 hours per week, but more than a third of those at work in the 15-17 age bracket had longer workweeks.

Statistics Norway (1999), by contrast, reports that in the most recent sample (1998), 49 per cent of all 16-19 year-olds were in the labour force.

Portugal

A few decades ago, work rather than schooling was the norm for Portuguese children. The Salazar dictatorship was hostile to popular education; with limited access to schools and minimal state encouragement to attend them, literacy rates were the lowest in Europe. (Williams, 1992)

It was not until after the revolution of 1974 that six years of compulsory school were instituted. Twelve more years would pass before mandatory attendance was increased to nine years. Labour legislation followed suit and in 1991 the minimum age for admission to employment was raised to 16 years. Still, as of the early 1990s over a quarter of all students failed to complete primary school, and the portion was as high as 60 per cent in the region of Braga, where, according to both the Federation of Trade Unions and the Ministry of Education, the main cause was entry into the full-time workforce. (Williams, 1992)

Official statistics have often underrepresented the true extent of child labour in Portugal, and this has led to a lengthy debate over the size and seriousness of the problem, particularly in the economically important textile, apparel and footwear industries. In 1989 official statistics identified 11,486 workers under 18 in these three sectors, and in 1991 figures were released indicating that there were 24,719 employed and an additional 3,834 self-employed 12-14 year-olds. In the same year, an ILO study estimated the true age 12-14 labour force at 63,000. (Eaton and Pereira da Silva, 1998) Unofficially, the Portuguese Labour Inspectorate had admitted to 40,000 such workers and another 160,000 older children working on a legal basis. (Williams, 1992) Unions, church groups, and independent researchers supported a much larger figure — 200,000 child workers under 14 alone. (Williams, 1992; Eaton and Pereira da Silva, 1998) Precise measurement was impeded by direct intimidation exercised by employers on researchers. (Eaton and Pereira da Silva, 1998) The relatively few violations turned up by government inspectors were concentrated on the textile and apparel region in the north of the country. There, church workers found that the main cause of child labour was family poverty. (Williams, 1992)

To determine the extent of child labour below the minimum age of 16, in 1998 the Department of Statistics for Employment and Vocational Training of the Portuguese Ministry of Labour and Solidarity conducted a survey of 26,000 households. They interviewed both the adult head of household and children between the ages of 6-15; questions probed the nature of economic activity among children during the survey week (in October) and the entire calendar year. In general, children self-reported far more activity than would be inferred from the reports of their parents, and these are the results I will summarize. In general, the survey found that 4 per cent of all children in this age group were at work during the survey week and 7.1 per cent worked during the school year. Most employment was unpaid, and took the form of children assisting their parents or other adults in market activities. Given just over one million children in this age range in Portugal, the survey implies that approximately 43,077 children were potentially in violation of Portugal's child labour statutes during the survey week and 77,465 during the year. As large as these numbers are, they are far lower than those cited by non-governmental organizations. It should be borne in mind, however, that even the Labour Ministry's figures are not as modest as they might appear, since they are averaged across all age groups. The rates for 15 year-olds alone are approximately 3-4 times as large.

Although unpaid, by most standards young children's work in Portugal is economically substantial. Table 15 reports the shares, average days per week, and average hours per day of work in three industries of particular interest, agriculture, manufacturing, and construction. Agriculture predominates, and children spend considerable time helping out. Nevertheless, manufacturing occupies a surprisingly large role, and the majority of children work long hours in

this sector. The same can be said for construction, which, even at 6 per cent of the 6-15 year-old workforce, is larger than one might expect.

Table 15:
Economic activity patterns for 6-15 year-olds in Portugal

Industry	Share of 6-15 workforce	% working 5 or more days per week	% working 4 or more hours per day
Agriculture	56	57	34
Manufacturing	12	80	72
Construction	6	70	84

Source: Ministério do Trabalho e da Solidariedade, Plano para Eliminação da Exploração do Trabalho Infantil, 2000

Although the survey gathered data on school-related activity, such as missing classes and dropping out, it is difficult to draw conclusions. Overall, the more students work, the less they study, but the official analysis of the survey does not provide clear evidence of causation. It seems, however, that unattractive schools rather than the need or wish to work are at the basis of drop-out. 56.2 per cent of premature school-leavers stated they “did not like to attend school” as the reason for dropping out. Only 13.4 per cent mentioned work.

Moreover, greater likelihood of youth employment was associated with low family incomes. This confirms that the Portuguese case may also correspond to Basu’s “child labour trap”, with low family incomes leading to children’s early entry into the labour force to the detriment of their education.

Spain

Officially, Spain reports 354,900 (15.5 per cent) paid employees among its population of 16-19 year-olds in 1999. (Instituto Nacional de Estadística, 2000) While youth unemployment is an exceptionally serious problem in Spain, it is unlikely that the true rate is only a fourth or less of other rates in Europe. In addition, this number does not include those under 16 in the labour force. Two published estimates of this group are 300,000 - 500,000 (McKechnie and Hobbs, 1998) and 200,000 youths under 14 in the informal sector alone (Cecchetti, 1998).

Italy

As we saw earlier, Italy officially recognizes 11 per cent of its 15-19 year-old population as being in paid employment. This should probably be viewed as an indication that most such work is outside the legal framework, not that it does not exist. Cecchetti (1998) refers to a survey conducted in 1987-91 by Italy's National Institute for Statistics which found that over 500,000 children ages 6-13 performed some sort of work, either paid or working unpaid, for a family business, and she believes this too is an underestimate. In a recent survey, the CGIL labour federation estimated 400,000 workers among children ages 11-14. Nearly half work in restaurants and cafés, but 10 per cent were in construction. All of this work is expressly illegal. The survey found relatively high levels of paid employment among children in the Mezzogiorno and predominantly family labour in the North and among Asian immigrants. Remarkably, more than half the young workers put in full eight-hour days or longer, but received low wages and few if any benefits. Like their Portuguese counterparts, working Italian children are much more likely to be premature school dropouts, but it is difficult to know the direction of causation. (Child Labour News Service, 2000, citing an Agence France-Press report)

Greece

According to the 1991 census, only 1.3 per cent of Greek children ages 10-14 are in paid employment, and this is true of only 14.3 per cent of those 15-19. (National Statistical Service of Greece, 2000) Indeed, as we saw, the latter percentage fell to under 9 per cent by the late 1990s, again according to official statistics. Unfortunately, these figures are taken directly from registration counts, but it is likely that in Greece, as elsewhere, the vast majority of young workers are outside the registration system.

The distribution of youth employment across industries in Greece resembles the pattern seen in developing countries. Table 16 summarizes National Statistical Service data for 1996.

Table 16:
Leading industries employing Greek youth
(by percentage of total youth employment)

	Girls 14	Boys 14	Girls 15-19	Boys 15-19	Total 14	Total 15-19
Agriculture	81.7	39.4	26.7	27.1	48.0	27
Manufacturing	10.2	26.2	15.7	15.9	23.0	15.8

Construction	0	7.2	0.7	15.8	5.7	9.7
Trade	0.0	17.6	25.1	22.4	14.1	23.5
Hotels and Restaurants	0.0	6.2	9.8	9.6	5.0	9.6

Source: National Statistical Service of Greece, cited in Cecchetti (1998)

Agriculture and manufacturing are prominent, and construction is a significant factor for older boys. A survey by the Greek National Foundation for Social Security, also for 1996, finds that the average number of days worked per person in the construction sector ranged from 40 for 13 year-olds to just under 70 for 17 year-olds. As in Portugal, early entry into the labour force is a major factor in educational outcomes; one survey cited by Cecchetti (1998) found that more than a fourth of all students who fail to complete compulsory education do so because of either paid or unpaid (family business) employment.

Japan

As was discussed earlier, Japan had less child labour during its initial phase of industrialization than comparable countries in North America and Europe. Nevertheless, the official figure of 5.5 per cent of 15-17 year-olds in the labour force is suspect. Japan has an elaborate system of school-to-work transition, in which employers must recruit using the school as an intermediary; direct contacts between students and employers are frowned on. This would support lower rates of youth employment, perhaps, but countervailing factors would have to include Japan's chronic labour shortage and its protected sectors of small, family business. Brinton (1998) includes this comment in her description of Japanese youth employment policies:

'The majority of high schools I visited either had a prohibition against students working while they were still enrolled or had had such a prohibition in the recent past. However, teachers frankly explained to me that despite this restriction, the majority of students in their schools were employed in arubeito (part-time jobs) or even full-time evening jobs. These jobs include legitimate ones as well as lucrative but less socially acceptable jobs, such as working in bars or entertainment establishments.'

Thus, Japan too may adhere to the pattern of widespread illegality and underreporting of teenage employment.

Summary

It is likely that, whatever the published figures, more than half of all teenagers below the age of 18 are in the labour force in every industrialized country. In countries for which there is more detailed evidence, children commonly begin work by the time they are 15, although the type of work they do changes as they grow older. Except in the United States, where there is no national system of registration, the overwhelming majority of young workers are working illegally, and even in the US illegality is widespread. This ubiquitous contravention of child labour law is one of the most significant aspects of children's labour; I will consider its implications at the end of the report.

Children tend to work primarily in trade and services, although there are significant numbers in agriculture, manufacturing, and construction in some regions. The countries of southern Europe — Portugal, Spain, Italy, and Greece — reveal employment patterns that resemble in some respects those of the developing world, with children still employed in large numbers in core activities, particularly footwear, apparel, and textiles in the manufacturing sector, and agriculture. Economic privation does not underlie most youthful labour market participation; in fact, the poorest children are less likely to work in the better-off countries, although the pressure of family poverty plays a larger role in southern Europe.

4. Hazardous work

Convention No. 182, Article 3 specifies as one of the “worst forms” of child labour “work which, by its nature or the circumstances in which it is carried out, is likely to harm the health, safety or morals of children.” Similarly, Convention No.138 calls on signatory countries to remove children under the age of 18 from work deemed hazardous to “health, safety or morals”. As I argued in Section 2, while society should be concerned for the health and safety of all workers, the physical well-being of children merits even closer attention because of their greater susceptibility to risk and the potential for more serious consequences of conditions arising early in life. It is sometimes argued that it is enough that work be as safe as any other activity children might engage in, and, since other aspects of childhood, such as sports, have even higher injury rates, we can afford to permit equivalent levels of risk in employment. The standard implicit in these two Conventions is different, however: it demands that we address any *predictable* (not “excessive”) harm to children in the workplace. In order to carry out this mandate, however, we would need information to be able to make these predictions, and few governments or independent researchers have undertaken this task.

I will begin this section by reviewing the direct evidence for dangerous youth work — injury and fatality rates as they appear in surveys and censuses. Then I will consider the indirect evidence, having to do with characteristics of children’s jobs that are themselves associated with elevated risk. In the next section I will focus on agriculture, which is known to be a dangerous form of employment for youth.

4.1 Direct evidence of hazardous child labour

Since there is no reason to suppose that child workers everywhere face the same risks, we have to consider the data by country. As it happens, there seems to have been much more analysis of the risks faced by child workers in the US than anywhere else, so this will take up the bulk of the discussion. Shorter discussion of the evidence in other countries will follow.

United States of America

Beginning with an analysis of fatalities, we can take advantage of a comprehensive data set maintained by the US Bureau of Labor Statistics, the Census of Fatal Occupational Injuries (CFOI). As discussed in Leigh et al. (1996), CFOI captures perhaps 90 per cent of all such fatalities.¹⁸ The raw counts of fatalities for children are presented in Table 17.

Table 17:
Fatal occupational injuries to US teenagers

Age	1994	1995	1996	1997*
Under 16	25	26	27	15
16-17	42	40	43	57

*Age categories changed to “under 15” and 15-17

Source: US Census of Fatal Occupational Injuries, various years

The numbers fluctuate from year to year, but no downward trend over this period is apparent. Nevertheless, the number of hours worked by teenagers rose significantly over the 1990s (recall the procyclicality of youth employment); hence the fatality rate per 100 full-time equivalent workers fell by more than a third (1992-98). (US Department of Labor, 2000)

Pooling the available years of data makes it possible to disaggregate them somewhat. Fatality rates by year of age appear in Table 18:

Table 18:
Fatality rates per 100,000 FTE workers by age, US

All ages	15	16	17
5	5	3.4	3.7

Source: Windau et al. (1999)

Surprisingly, the youngest workers in this group have the highest fatality rates. (Since the denominator, the estimated hours worked by each age group, is drawn from the Current Population Survey discussed earlier, rates cannot be calculated for workers under 15.) This occurs despite the tendency for teenagers to work in more dangerous industries (by adult standards) as they get older and may be an indication that the risk patterns applicable to adults may not be applicable to children.

To gain a better understanding of these risk patterns, we can turn to the data on fatal injuries, pooled for the years 1992-98, by industry presented in Table 19.

Table 19:
Percentage of fatal occupational injuries by industry, US workers 17 years old and younger

Agriculture, forestry, and fishing	42.7
Construction	13.7
Manufacturing	5.1
Transportation and public utilities	2.6

Trade	22.2
Services	8.1

Source, US Department of Labor (2000)

Agriculture plays a striking role, one we will examine in more detail in the next section. But the relatively “safe” industries, particularly trade (which combines wholesale and retail trade), also make an appearance. These numbers can be misleading, however, because they do not take into account the amount of time children spent working in each industry. Table 20 presents a fascinating comparison between the risk of fatal injury for children and for prime-age adult workers, adjusting for hours of work. That is, it computes two sets of ratios, the rate of fatal injury for children per amount of labour by industry and the same rate for adult workers per amount of labour, and then reports the first as a percentage of the second. This gives us the relative risk faced in each industry by children. If their risk is equal to the average risk faced by adults, the ratio would be 1.0; a ratio greater than one indicates that children face a greater risk.

Table 20:
Relative hourly risk of fatality, 15-17 year-olds compared to 25-44 year-olds, US

Group	Relative risk ratio
Total	0.81
Agriculture, total	1.05
Agriculture, wage and salary	0.95
Agriculture, self-employed and family workers	1.25
Non-agriculture, total	0.65
Non-agriculture, wage and salary	0.62
Non-agriculture, self-employed and family workers	2.41
Government, total	0.93

Source: US Department of Labor (2000)

Overall, teenagers face less risk of fatal injury on the job, but not as much as one might suppose, given the legal and social barriers to their employment in more hazardous industries. Indeed, after one and half centuries of child labour legislation and enforcement, a child risk that is four-fifths of adults’ is not encouraging. This harsh judgment might be qualified by the observation

that it is precisely in those areas not covered by US child labour law — agriculture and certain forms of family business — that children are at greatest relative risk.

Table 20 does not explore relative risk for specific sectors of nonagricultural employment, but the US Department of Labor (2000) examined construction specifically. They found the risk of fatality for 15-17 year-olds to be twice that of prime-age adults and over seven times the averaged faced by all teenage workers. This finding should be taken as a call to action. Construction is known to be dangerous in general; if it is twice as dangerous for children it is difficult to understand why children should be engaged in it. I will return to this question at the end of the report.

Injury data is of lower quality in the United States, because there is no nationwide, or even statewide, surveillance system, such as CROI provides for fatalities. Firms are required to maintain injury records by the US Occupational Safety and Health Administration, but there is little oversight, and it is probable that many injuries that should be recorded are left off the books. The available evidence suggests that the problem is particularly pervasive for small enterprises. Another potential source of data is claims by workers under the various state Workers Compensation programmes. (There is no national compensation system.) Here the evidence suggests that undercounting is even more severe; best estimates are that one-third of all claims that should be filed are not, and that this number may even approach two-thirds for teenagers.¹⁹ How then should we interpret data such as that presented in Table 21?

Table 21:
Nonfatal lost worktime injuries and illnesses, US

Year	All workers	17 and younger
1994	2,236,639	23,131
1997	1,883,380	11,248

Source: US Department of Labor (2000)

According to this information, the number of injuries resulting in time away from work fell by 15.8 per cent over this three-year period for all workers and by an astonishing 51.4 per cent for young workers at a time when employment rates and hours worked were rising rapidly for all groups. Even if we believe that American workplaces became significantly safer during the 1990s (and the more reliable CROI does show a slight decline in the absolute number of fatal injuries), it is difficult to place any credence in this time series. Perhaps the only inference we can draw is that official data on injuries became less reliable as the decade proceeded.

Despite the deficiencies in the data, suggestive studies have been performed using Workers Compensation claims, since these contain a wealth of information concerning the claimant, the circumstances giving rise to the claim, and the type of injury that resulted. State Workers Compensation boards produce analysis of their claims records; perhaps the most useful studies look at data from Washington State, since they have a fully public system for safety regulation (a state Occupational Safety and Health Administration) and Workers Compensation insurance, as a

result of which a wider variety of records are accessible to researchers. Using three years of pooled Washington compensation data and census employment and hours data, Miller and Kaufman (1998) constructed rates of compensation claims per 100 workers by age group and industry, as presented in Table 22.

Table 22:
Workers compensation claims per 100 workers, State of Washington, 1988-91

Industry group	Ages 16-17	18 and up
Agriculture/forestry/fishing	11.4	12.8
Construction	21.1	24.6
Manufacturing	8.6	14
Food stores	9.6	13.2
Restaurants	11	14.7
Other sales	7.1	11.2
Service industry	5.5	5.7
Total	9	10.4

Source: Miller and Kaufman (1998)

This would appear to indicate that injury rates in all industries are higher for adults, but it fails to take into account the fact that teenagers primarily work part-time. When these numbers are adjusted for hours of work (as indicated in the 1990 census), the total claim rate for 16 and 17 year-olds becomes nearly twice that of older workers (19.4 to 10.6). Again, it should be remembered that, while Workers Compensation claims underrepresent the incidence of injuries for all workers, they do so even more for teenagers. For instance, if it is true that teenagers are half as likely to file when they are entitled to, their true injury rate per hours worked may be four times, and not twice, that of adults. Moreover, as we shall see shortly, Workers Compensation criteria discriminate against part-time workers, and this may further bias the reported comparison.

There are other potential sources of information for injury rates. One can, of course, simply ask young workers if they have been injured, and National Research Council (1998) summarizes the results of several surveys of high school students, between 17-50 per cent of whom said they had been injured at work. In addition, the National Institute for Occupational Safety and Health (NIOSH) has conducted surveillances of hospital emergency department (ED) admissions, and this gives us some indication of the prevalence of injuries that require this sort of care. Castillo et al. (1999) use ED data to call into question the injury totals we observed in Table 19. Sampling during 1996 revealed that, of all ED patients ages 14 - 17 during that year, 7 - 13 per cent, or 70,000 - 105,000 were injured at work. (These are confidence intervals for extrapolations to the entire population.) From other studies, it is estimated that 34 per cent of all occupational injuries are treated at hospital EDs. Thus, the sample indicates that 210,000 - 315,000 injuries to this age group occurred during 1996. This is roughly *twenty* times the number of nonfatal lost worktime injuries reported in official data. (Greater precision is not

possible due to differences in injury and age criteria.) Such disparities call into question any conclusion that might be drawn from official sources. Incidentally, one indication of injury severity reported by Castillo et al. is that a followup of one ED sample found that 35 per cent of young workers were limited in their normal activities for more than one week.²⁰

To summarize, the United States has excellent data on fatal occupational injuries and poor data on nonfatal injuries. From this, we can infer that youth employment poses a risk of fatal injury that is somewhat smaller on average than the adult risk, although agricultural work is just as risky and construction far more so. Injury rates, however, may well be much higher for teenagers, once adjustment is made for their fewer hours of work. Some lines of work, particularly agriculture and construction, are currently problematic for children.

An additional comment should be made about Workers Compensation, which is by far the most significant occupational safety and health programme in the US. As we saw, teenagers are much less likely to file claims for which they are qualified, a problem that needs to be studied and remedied.²¹ In addition, part-time workers, who are disproportionately young, are less likely to qualify for wage replacement benefits, because it is usual to require three missed workdays. This can be a week for a part-timer, and an employer can adjust the injured worker's schedule so that even a longer period can pass without the worker "missing" three days of work. (Castillo et al., 1999) Benefits for teenagers, if paid, may grossly underrepresent the true costs incurred. It is common to set wage indemnification at 2/3 of the worker's wage, but young workers earn less, and they are unlikely to pay income taxes, which means that their effective replacement rate will be lower. Finally, and crucially, unlike adults, lost work is not the primary cost of serious injury to children. Disruption to their education is likely to be far more consequential, and Workers Compensation, drawing implicitly on an adult wage-earner model, offers no benefits to defray these costs. In one survey of hospital EDs in New Zealand, for instance, 55.9 per cent of teenage injuries were to the upper extremity (42.7 per cent to the hand) and 18.0 per cent were to the eye; these are the sorts of injuries likely to interfere materially with school work. (Dufort et al., 1997) Those administering Workers Compensation programmes should be encouraged to investigate the impact of adolescent injury on school work and may consider ways by which a portion of the remediation costs could be passed on to employers.²²

United Kingdom

Like the United States, Britain lacks a sound system of record-keeping that could provide a reliable estimate of the frequency of injuries to young workers. The Health and Safety Executive appears to underestimate the frequency of injuries relative to its counterparts in other industrialized countries (Dorman, 2000), and reports very few injuries to working children. To its credit, HSE has published surveys suggesting that the true injury rate for youth is much higher than officially reported. (Heptinstall, 1998) Hobbs and McKechnie (1997) review previous independent studies of teenage occupational injury rates, finding a range of 31-36 per cent. Their own surveys produced lower results, with 18-23 per cent of high school students saying they were injured at work. Heptinstall reviews the same literature and expresses confidence in the rough estimate of one-third of all teenagers suffering an occupational injury. She cites one study in which 27 per cent of those injured said they required medical attention. These numbers

(except for Hobbs and McKechnie's own findings, which are somewhat lower) are consistent with the US data we considered above.

Australia

The most recent data from Workers Compensation records indicates that there were 13 fatalities and 7080 injuries to workers under 20 nationally in all industries, an age category not directly comparable to those specified by ILO conventions, but indicative nevertheless. Recognizing that this might not reflect the true incidence rates, the National Occupational Health and Safety Commission (NOHSC) performed a census of inquest records for traumatic work-related fatalities during the years 1989-93. They found an alarming 17.4 per cent were for individuals under 20. Agricultural and extractive employment is relatively high in Australia, but even "normal" service sector work has its risks. NOHSC surveyed 304 workers in the fast food industry, 82.6 per cent between 15-20, employed at several outlets of the same company. Few of the reported accidents were lost-time, but minor burns and cuts were described as "very common". Deep fryer work was responsible for many of the burns, while cleaning and manual handling were responsible for most of the lost-time injuries. Back and hearing problems were the main chronic injuries. (Australian National Occupational Health and Safety Commission, 2000)

New Zealand

A revealing study of youth injury risks in typical New Zealand workplaces was conducted in 1990-93 (Dufort et al., 1997). The sample consisted of 13,800 adolescents, ages 15-19, living in the city of Dunedin. Thus, the data are only partly applicable to the age group we are concerned with in this report. Of the entire sample, 26 per cent were employed, and 63 per cent of these had full-time jobs. Interestingly, although New Zealand has a permit system for youth employment, no permits were issued during the study period in this region. Dufort and his colleagues culled their injury data from the ED of Dunedin Hospital, which is the only such facility in the city. By combining employment data from their survey with medical data from the hospital, they were able to construct injury rates per hours worked for the whole sample and its components. This information is presented in Table 23. It should be borne in mind that US experience indicates that only about a third of all injuries receive ED treatment.

Table 23:
Adolescent occupational injury rates, Dunedin, New Zealand

Group	Rate per 100 FTE's
Overall	13.7

Female	5.8
Male	20.6
15 years old	12.4
16 years old	16.9
17 years old	15
18 years old	13.1
19 years old	13.2
Construction	25.7
Transportation/Communication/Utilities	18
Manufacturing	14.8
Business and Retail Services	13.1
Retail Trade	9
Handlers, equipment cleaners, helpers, labourers	35.4

Machine operators, assemblers, inspectors	19.4
Precision, production, craft, repair	15
Service, except protective and household	9.9

Source: Dufort et al. (1997)

It is striking that nearly one in seven workers (on a full-time equivalent basis) receive an injury necessitating ED treatment. This is not elevated by the inclusion of older teenagers, since the relationship between age and risk of injury takes an inverted U-shape: lower for the youngest and oldest workers, highest for those in the middle (16 and 17 years old). Boys face almost four times the risk for girls. There is a wide variation in the riskiness of different types of jobs, with more physically intensive work associated with higher injury rates. Again we find construction to be a cause for concern; it has the second-highest injury rate, at more than one per four FTE's. Given the potential for extremely serious injuries in this industry (evidenced by its relatively high fatality rate), its widespread employment of teenagers should be re-examined. Also, since this is an urban sample, there are no injuries attributed to agriculture, which we know from other research to be more hazardous than average. Finally, if the 1:3 ratio of ED visits to all occupational injuries holds for this sample, the totals in Table 23 should be tripled to get the full injury rate.²³

Portugal

The Labour Ministry survey of children between the ages of 6-15, cited earlier, included questions asking about occupational injuries and diseases. 2 per cent of these young workers indicated that they had suffered accidents requiring medical attention. Of these, a fifth required hospitalization. The information was not presented by sector, so it is not possible to assess the relative risks youth face in different industries and occupations. The study mentioned, however, that the majority of cases were found among family workers. (Ministério do Trabalho e da Solidariedade, Plano para Eliminação da Exploração do Trabalho Infantil, 2000)

Italy

The 1998-2000 CGIL survey cited earlier found that 13 per cent of all accidents occurred to workers between the ages of 11-14, which, if true, would indicate very high relative risk ratios. The survey finds that in 61 per cent of these accidents, employers attempt to withhold information from the government. The methodology behind these startling claims was not presented in the initial account of the survey; the full report is expected to appear in 2001 (Child Labour News Service, 2000).

4.2 Indirect evidence

Apart from data on actual injuries and fatalities, we can learn a lot by looking more closely at the kinds of jobs typically held by adolescent workers. Because of their school commitments, which are seasonal, and their relative lack of experience and skills, adolescents often find themselves in what economists call “secondary” jobs. (Dickens and Lang, 1992) Such jobs are characterized by a cluster of characteristics: the absence of significant promotion ladders within the firm (internal labour markets), high turnover, little on-the-job training (OJT), less scope for worker discretion or application of skill, heightened job insecurity, greater variation and uncertainty in hours, low pay, and few benefits. (Doeringer and Piore, 1971; Osterman, 1982, 1988; Tilly, 1996) Not every secondary job displays all of these characteristics, but all display most. Secondary employers are more likely to be small, although some large firms now maintain primary and secondary job categories under the same corporate roof. Moreover, workers holding secondary jobs are disproportionately minorities, women, youth, and immigrants. On average they have less education and experience than primary workers, although many of them have equivalent qualifications to workers making more money under better conditions in the primary sector. (Their apparently involuntary attachment to the secondary sector is taken by Dickens and Lang to be the telltale sign of segmentation in general.)

Because there are indications that secondary employment is increasing in many parts of the industrialized world, it has been the focus of many recent studies. For our purposes, the most important finding is that secondary (or its close relative, “precarious”) employment is much more likely to be hazardous employment. It is important to consider the aspects of secondary work that are responsible for this result, since they can guide programmes to make worker safer for youth. Factors that have been identified include:

- \$ lack of training: secondary workers are less likely to receive on-the-job training of any sort, whether skill- or safety-oriented;
- \$ less availability of regulation: secondary workers are less likely to be covered under the relevant safety and health statutes, and even when they are covered they are less likely to be aware of their rights (particularly if they work on a contract or outsourced basis);
- \$ economic incentives: secondary employers tend to face more competitive economic conditions, leading them to look for cost reductions wherever possible, including less expenditure on working conditions; and
- \$ less worker input: secondary work tends to be structured in a more authoritarian fashion, and workers are less able to influence work environment policies; they are also less likely to be represented in safety and health committees.

(Quinlan, 1999; Dorman, 2000)

Viewed in this light, the evidence we have already examined concerning the types of work performed by children demonstrates that their risk at work is not simply a function of their own personal characteristics, nor even of the technological characteristics of the industries they work in. The manner in which work is organized and the extent of commitment to the worker on the part of the employer are both very important. This leads to a quandary: on the one hand, it may be entirely appropriate for children to work in jobs that are sporadic, require less skill, and presume greater turnover; on the other, these are jobs for which the current system of health and safety regulation — considered in the broadest sense, and including private incentives — does not work very well.

Among the above factors is the relative lack of training in jobs that tend to be held by youth. The surveys cited earlier in this report also verify that training is insufficient. Castillo et al. (1999), for instance, report surveys of Massachusetts high school students which find that, even though most are exposed to substances and activities known to be hazardous, only half receive any safety training at all. Hobbs and McKechnie (1997) describe a union-sponsored survey in which more than a third of young workers report receiving no safety training, despite its legal requirement as a condition of employment. Since multiple public policy goals coincide on the issue of training, we will take it up again at the conclusion of this report.

Regarding the availability of regulation, we have already seen that, at least in the United States, workers compensation is far less effective for young workers. To this we should also add the relative lack of effective coverage (whether legally mandated or not) in many of the occupations commonly held by children, including family enterprises, agriculture, restaurants and hospitality, and the informal sector. Remedying this lack may in some cases be a matter of upgrading the statutes, but for large parts of the economy we may be reaching the inherent limits of this strategy. (Dorman, 1997) This is an important issue for health and safety policy in general, as well as for youth employment.

In Section 2 we discussed the bias toward family employment. The general evidence on self-employment as a risk factor, and the specific evidence of higher injury and fatality rates among children working in family enterprises (as in Table 20), calls this bias into question. This is not to dispute the large benefits that may also exist for both children and their families in these situations, but the tendency to exclude family employment from public purview altogether is clearly mistaken. We will return to this question shortly.

Finally, the role of worker input in improving working conditions reminds us that a fundamental concern regarding child labour has been the incomplete development of agency on the part of these still-growing workers. We have seen that they tend to earn less money, sometimes below the stipulated minimum wage, and that they are likely to accept risks on the job that adults might contest. ‘Abolitionist’ positions often assume that this disparity in agency is inherent and that children should not work in any situation for which the disparity matters. I will argue at the conclusion of this report, however, for the alternative position that work, if properly structured and safe, should provide opportunities for young people to acquire this agency more rapidly and fully.

5. Populations at risk

Thus far, we have looked at the risks on the job faced by children “in general”; the distinctions have been mainly those of one type of work rather than another. In this section I will look at two populations that face elevated risks of dangerous work, rural and migrant or minority children.

5.1 Rural youth

In a sense, agriculture is an industry like the others we have considered, and we could treat it in the same way as trade, services, manufacturing, etc. There are reasons for considering it separately, however: for the most part, agricultural work is undertaken by rural children who have fewer alternative work options. In addition, agriculture is a “problem” industry in all developed countries, requiring a degree of public support in order to remain viable. Children who work in agriculture do so either as contributors to a family enterprise, already a health and safety warning sign, or as hired hands in a line of work that generally occupies the lowest position in the labour market. Add to this the risk factors associated with the highly mechanized, yet still arduous, and chemical-intensive work that modern farming has become, and it is not surprising that the health of many rural youths is damaged by their labour.

The situation in the United States is once again relatively well-documented, in part due to two recent studies, the Labour Department’s *Report on the Youth Labour Force* (US Department of Labour, 2000) and Human Rights Watch’s *Fingers to The Bone* (Tucker, 2000). I will review them here and add evidence from other sources.

The Labour Department’s data comes from the National Agricultural Workers’ Survey, which consisted of 13,380 interviews conducted over the period 1993-98. 951 of these were with 14-17 year-olds, and a further 6,422 children were identified because their parents were interviewed. The 951 young workers account for 7% of the sample; since the Labour Department estimates that there are 1,800,000 farmworkers in the US, this yields an estimate of 126,000 between the ages of 14 and 17.²⁴ Based on their survey, they estimate that this segment of the workforce accounts for 4 per cent of the weeks worked by all farmworkers. Of the youth subsample, about half were foreign-born (compared to 77 per cent of adult farmworkers), more than half did not live with a parent, and the majority lived in households below the poverty line. Wages are very low: 30 per cent of the 14-17 year-olds actually earned less than the minimum wage (which does not apply to agriculture in most states), while only 20 per cent made more than one dollar an hour above the minimum. Despite their economic condition, however, they receive few social services; only 7 per cent of the households of teenage farmworkers received Food Stamps, for instance, compared to 13 per cent of all farmworkers.

This population is at a severe disadvantage with respect to education. 40 per cent of these young farmworkers work in excess of 13 weeks a year, which means, given the US school schedule, that they are in the fields while classes are in session. A distressing 37 per cent have already dropped out of school, while 15 per cent more are at least one grade behind their age group.²⁵

Of children of farmworker parents, 31 per cent of 16-17 year-olds worked, as did 18 per cent of 14-15 year-olds. If parents are paid by the piece, their children are more likely to work, echoing a familiar theme from the era of the industrial revolution and many of today's developing countries. In addition, nonworking children often accompanied their parents to the fields. This aspect of children's involvement in the farm environment is vividly captured by testimony from Pineros y Campesinos Unidos del Noroeste (1997), a farmworker advocacy group in Oregon:

'The first field we visited could have been mistaken for a day care center. There were many small children in the field with their parents. Some were sitting in the dirt, just being near their families. Some were picking strawberries just like their parents and older siblings. We saw a baby stroller which was advanced a few feet occasionally to keep up with the progress of the picking. The families were together, but there wasn't much joy. At 12 cents a pound for the strawberries, minus room and board costs, this day care center was a part of survival.'

The Labour Department report confirms that agriculture is hazardous work for adult and child alike. Children are at particular risk from accidents involving tractors, which are the leading cause of fatal injury. As we have already seen, agriculture accounts for a disproportionate percentage of deaths recorded by CFOI, but, ironically, more than half of these deaths occur as a result of work children performed on their parents' farms. Extrapolating from CPS data on hours worked, the Labour Department study calculates that teenagers working in agriculture face a risk of death almost six times that of nonagricultural workers, and second only to construction. How much of this is due to the specific hazards of agriculture is hard to determine, however, since the risk of fatal injury faced by teenagers who are self-employed or working for family businesses is nearly as great in the nonagricultural sector as it is in agriculture. However we might interpret these findings, they call into question the exemption of family farms from US safety regulation. The National Research Council (1998), after weighing the different sides of the debate, came to a consensus in favor of extending OSHA coverage to family farms.²⁶

Fingers to The Bone, authored by Lee Tucker (2000), is largely based on research conducted in Arizona. It found most children beginning work in the fields between 13 and 15, although some start as early as four. Most young farmworkers are compelled to do this work due to poverty and the lack of other employment opportunities. They are unlikely to escape poverty in this fashion, however, and approximately a third of those interviewed said they earned significantly less than the minimum wage.

Human Rights Watch found these jobs to be hazardous. Pesticides were a significant problem, and many interviewees described cases of acute pesticide exposure. Despite this, none of those workers interviewed said they had received the mandatory training on avoiding and responding to pesticide exposure; indeed some did not even know what pesticides are.

In addition to field work, work in processing plants can be dangerous. The report mentions an episode that occurred in a Washington State packing plant on July 25, 1997, when approximately

100 workers suffered acute carbon monoxide poisoning. Seven of them were under 16 years of age, and an additional ten were 16-17. This followed weeks of chronically high exposure. The study interviews a number of girls who were victims of sexual harassment on the job. Given the conditions in the fields — dispersed work locations and the dependence of farmworkers on the employment and scheduling discretion of the overseer — it is not surprising that this occurs.

Outside the United States, attention to the hazards faced by children in agriculture appears to be greatest in Scandinavia. At the US-Nordic Conference on Rural Childhood Injury Prevention in 1997, for example, representatives from Denmark, Norway, Sweden, and Finland concurred in identifying child farm injuries as a serious problem. Lundqvist (1995) reports that there were 45 fatal injuries in agriculture to children under 20, according to censuses conducted by the Norwegian Occupational Safety and Health Administration. (The census was abolished in 1990.) He also describes studies by the Danish National Board of Occupational Safety and Health, which found that during the 1984-88 period there were eight fatal accidents in agriculture to workers between the ages of 15 and 20, as well as an additional 35 resulting in amputations. While official statistics in that country show a decline in accident rates between 1988 and 1992, the true trend is unclear, since most accidents in this sector aren't reported.

It is impossible to know whether the risks observed in American and Scandinavian agriculture are representative of those in countries where the problem is less-studied — or whether they receive more attention in countries where they are greater.²⁷ We know enough, however, to reject the assumption that agricultural work is intrinsically suitable for young people, because of its association with fresh air, nature, etc. In fact, agriculture was the only industry of those surveyed by the European Foundation for the Improvement of Living and Working Conditions in which more than half of those employed reported feeling at risk. (Paoli, 1992) Farm work uses dangerous equipment, chemicals and exhausting work processes and should be as closely scrutinized as any other.

5.2 Migrant and other minority children

It is a general pattern that migrant children and children from ethnic minorities are at greater risk of abusive labour conditions, despite (on US evidence) their lower employment rates overall. This is particularly the case in agriculture, where much of the most arduous work is undertaken by guest workers, undocumented workers, and others who cross national borders to find employment. For example, the US Department of Labor (2000) found that, of the third of teenage farmworkers who are migrants, nearly all are foreign-born and a staggering 80% live apart from their parents. This suggests that poverty is endemic among this population.

In continental Europe, perhaps the most intractable child labour problems are found amongst the Roma. Nearly every country has at least some Roma citizens (there are at least six million altogether), and they tend to live outside the mainstream of the surrounding economies. Roma children begin working early in family businesses; by the time they are 12 they are often working full-time. School drop-out rates are high, while adult literacy rates are low. There have been reports of Roma children being smuggled into Italy where they are coerced into working for

gangs engaged in petty theft. After learning these skills they are sold to organized crime operations. (Council of Europe, Parliamentary Assembly, Social, Health and Family Affairs Committee, 1997) Similarly, the situation of Roma children in Greece is poor. They are overrepresented among street children (along with Albanians and other immigrants) and many end up in prostitution. A survey conducted by the Maragopoulos Foundation for Human Rights during 1995-97 identified 2930 youths under 18 in prostitution in Athens; as many as 30 per cent of them were of Roma origin. (Somewhat more than 40 per cent were immigrants, chiefly from Albania and Iraq.) Discrimination against the Roma and their general social exclusion make it difficult to combat these abuses. (Cecchetti, 1998)

Another group with distinctive child labour problems is the immigrant Chinese community. Since family businesses play an important role in most of these communities, it is not surprising that children supply a significant amount of labour. (Song, 1999) A more serious abuse arises due to the debts families sometimes take on in order to emigrate. Under duress, they may supply their children for bonded labour; in Italy, bonded Chinese youngsters are thought to work in the apparel industry. (Cecchetti, 1998)

Overall, the dominant trend in child labour described in this report does not hold for minority and migrant populations. Their problems are qualitatively similar to those found in developing countries and require comparable policy responses. They also remind us that general economic development does not reach all social groups evenly and so, even in the best of cases, cannot be regarded as magic cure.

6. Child prostitution and child trafficking

This chapter belongs in this report because child prostitution is singled out by Convention No.182 as one of the “worst forms” of child labour. It generally involves working for others (Klain [1999] cites the estimate that 80-95 per cent of all prostitution is controlled by pimps), and it is undertaken, as we shall see, largely in response to immediate economic necessity. It also more than qualifies as a “worst form”, and not only because of its intrinsic threat to the psychological and social well-being of children. The majority of child prostitutes are physically abused by either pimps or customers; moreover, they are at high risk from contracting HIV/AIDS and other diseases. Although developed societies are becoming more tolerant of prostitution in general, the case for eradicating child prostitution is very strong.

It is impossible to say how prevalent child prostitution actually is. Government citations are a notoriously inadequate source of information. Lee and O’Brien (1995), for instance, reproduce British Home Office data on cautions and charges for prostitution issued against children 17 and under for the entire country between 1989 and 1993. Aside from the low absolute number of these citations (1890 cautions and 1544 proceedings over the five years), the time trend is unreliable. Cautions for both boys and girls declined by approximately 25 per cent between 1989-90 and 1992-93; the corresponding declines were 82 per cent and 48 per cent for charges. The authors report that the declines were concentrated in a few regions that became “tolerance zones over that time interval; in any event, it is not plausible that the true incidence of child prostitution could fall so precipitously.

In the absence of official data, we are left with isolated surveys in different localities around the world. Thus, Kane (1998) cites reports of more than 400 child prostitutes in Calgary and up to 3000 in Montreal, and ECPAT (1999) finds “hundreds” in British Columbia. Earlier I cited the Maragopoulos Foundation survey (1995-97) that identified 2930 child prostitutes in Athens; more than 200 youths in this study were under 12 years of age. According to the Foundation, child prostitution had tripled in the region during the half-decade prior to the study period. These studies are valuable for the light they cast on this urgent problem, but it is difficult to know how to extrapolate from them to arrive at a sense of the overall dimensions of child prostitution. One attempt to do this, however, was undertaken by the US Department of Health and Human Services; they arrived at an estimate of up to 300,000 child prostitutes in the United States as a whole. (Klain, 1999) If true, this would mean that this “worst form” of child labour is not a marginal or vestigial problem in the US, but exists on a national scale.

The typical pattern is for children to find their way into prostitution after spending a period of time living on the street (although we will consider another route, being trafficked, shortly). This means that there are two issues to consider, the number of children ending up on the street, and the likelihood that this will lead in turn to prostitution.

The presence of large numbers of street children seems to be characteristic of urban areas throughout the developed world. Kane (1998) cites a 1989 estimate of as many as 1.3 million runaways and homeless young people living on the streets of the US, although Klain (1999)

cautions that such estimates have a wide margin of error, because the samples found in academic studies are small, while social service agencies fail to reach most of this population. She cites another estimate, by the National Incidence Studies on Missing, Runaway, and Thrownaway Children in America, that the total is closer to 600,000 runaways and abandoned children. According to Cecchetti (1998), it has been estimated that 40,000 children run away from home each year in Britain; this contributes to the larger total of 75,000 who are said to be missing there. (Council of Europe, 1997) Cecchetti also reports an estimate of 10,000 street children in France (which would be comparatively low, if true), but as many as half that number in Lisbon alone. Again, it should be stressed that these estimates are of suggestive value only; still, they indicate that the population most directly at risk of being drawn into prostitution is substantial.

Once living on the street, children frequently enter the sex trade. Lee and O'Brien (1995) review a number of British studies and conclude that 15-20 per cent is a minimum estimate of the percentage of long-term street children who turn to prostitution for survival. This is broadly consistent with the evidence from North America, as summarized by Klain (1999). She found that prostitution was reported by 35 per cent of girls and 40 per cent of boys in one study, 7 per cent of girls and 22 per cent of boys in another, and 26-31 per cent of girls and 26-28 per cent of boys in a third. Other studies: 54 per cent of street youth in Toronto, 26.4 per cent of runaways in Los Angeles, 19 per cent of runaways and homeless youth in Houston. Viewing the connection from the other side, she points out that studies tend to show a majority of child prostitutes as having run away from home at least once, although, interestingly, she cites one study in which more than half were living with their parents or families even at the time they were involved as prostitutes.

In thinking about the risk factors associated with child prostitution, it helps to think about both of these steps separately. Clearly, many youths leave home at an early age to escape family situations that have, for them, become unbearable. Extreme poverty may also be a factor, either directly in the case of homelessness or indirectly in its effects on the child's family. Some children, labeled "throwaways", are expelled by their parents and forced to fend for themselves. Significantly, many children end up on the streets due to the failure of social service programmes. One British group working on child prostitution has estimated that 25-40 per cent of the children on the street were previously in residential care. (Lee and O'Brien, 1995) The positive side of this statistic (if it is accurate) is that there is often a "first chance" to address the needs of these children, and the possibility exists that we might make better use of it.

Among the reasons that street children so often end up as prostitutes, surely the most important is sheer economic necessity. There are few alternative sources of income, particularly since most of these children are beyond the reach of social services. There are other factors as well. The brutality of life on the streets may make the abuses of prostitution seem more acceptable (Kane, 1998), and the loneliness that often drives children into this situation may be relieved by their pimps and customers. (Klain, 1999) Klain also finds that some gay teenagers are impelled toward prostitution by the intolerance of the larger society, while low self-esteem brought on by academic or job failures may also play a role. One of the more controversial topics is the relationship between sexual abuse in the family and subsequent prostitution. A number of the authors referenced in this section believe this to be a significant factor, with ECPAT (1999)

citing studies that claim that a majority of child prostitutes have a history of abuse. Beyond this particular issue, however, it is clear that emotional problems and substance abuse, whatever their origins, are common among child prostitutes and street children generally. (Klain, 1999)

Not all children in the sex trade make their way under their own power, however; an alarming number appear to be trafficked by adults. From the fragmentary evidence now beginning to appear, most such children come from developing or transitional countries, typically recruited under false pretenses. According to EPCAT (1999), this fate has befallen many children from Central and Eastern Europe, who are delivered into prostitution, mostly in Western Europe but sometimes to North America and Asia. They also cite a study by Terre des Hommes Netherlands concerning girls from Africa who are sold through a chain of traffickers to their ultimate European destinations, where they are coerced into prostitution. Early this year a study by the US Central Intelligence Agency (CIA) was leaked which provided evidence for similar activities in the United States. (The report was completed in November 1999 but not released.) Their central finding was that up to 50,000 women and children are trafficked to the US for use as prostitutes, abused labour, or servants. Much of the report appears to consist of snapshots of particular episodes: Mexican girls as young as 14 recruited by offers of domestic employment and then delivered to brothels frequented by migrant workers, girls from Asia and Africa sold to traffickers by their parents, and similar abuses. According to the CIA, these traffickers prey primarily on women and children from Thailand, Vietnam, China, Mexico, Russia, and the Czech Republic, but are also active in the Philippines, Korea, Malaysia, Latvia, Hungary, Poland, Brazil, and Honduras. It cites an internal assessment by the US Immigration and Naturalization Service that it had identified 250 brothels in 26 American cities which appeared to be repositories for these forced prostitutes. (Brinkley, 2000) In response to the shock this information has generated, the US House of Representatives recently passed a bill to provide more statutory authority to combat human trafficking. (Schmitt and Brinkley, 2000)

Thus far we have considered child prostitution that takes place in the developed countries. It would be a mistake, however, to think that this represents all facets of the problem. Citizens of the industrialized world "export" this dreadful industry by engaging in child-sex tourism abroad. The problem is worldwide, but most of the attention has focussed on Southeast Asia. Here tours are organized that openly appeal to the child-sex interests of wealthy adults. To determine where the demand for this industry originates, ECPAT analysed 240 identified cases in which legal action was taken against foreigners for sexually abusing children in this region, covering the years 1991-96. They found 24-25 per cent of the violators were from the United States, 16 per cent German, 13 per cent British, 12 per cent Australian, and 7 per cent each French and Japanese. Together, these six countries comprise four-fifths of the foreign demand for child prostitution. Not all of this abuse is exported, however: child-sex tourism can also be found in such first-world cities as Amsterdam, Las Vegas and New Orleans. (Klain, 1999) Given the crucial role played by demand in this industry, as well as the difference in resources between the countries supplying demand compared to those supplying prostitutes, it does not seem fair for the entire burden of enforcement to be placed on the developing world, as is now the case.

Given what we now know about the dimensions of child prostitution and its devastating effects on the children themselves, perhaps the central question concerns how to pursue its eradication.

Historically, in much of the developed world, prostitution was criminalized, and the police and the criminal justice system were used to identify and punish prostitutes. This is still the case in many jurisdictions, and where it is one must ask whether this is an appropriate response to the plight of children. Surely their responsibility for their situation is much less than that of adults, and the main goal of public policy should be to help them avoid the life-threatening risks they currently face. At the same time, it is becoming more common to treat prostitution as a semi-legitimate economic activity and another component of the service sector. This is often motivated by the desire to help prostitutes rather than punish them, but once again it is doubtful that children are well served. Even for children who have not been trafficked and have “chosen” prostitution, the long-term consequences they face are intolerable, and society should not look the other way. Finding a strategy that addresses the specific needs of child prostitutes even as attitudes toward adult prostitution undergo a sea-change is our principle challenge. Two recent steps in this direction deserve special mention. First, the Council of Europe in 1993 issued recommendation R91 on Sexual Exploitation, Pornography and Prostitution of, and Trafficking in, Children and Young Adults. This measure recommends a social rather than criminal approach to child prostitutes, and it also calls for restraint by advertisers who sometimes glamorize child sex. Also, Japan last year passed new legislation targeting child prostitution and child pornography. It makes it a crime to pay for sex with a minor, but does not criminalize the child prostitutes themselves. The law was welcomed by advocacy groups for women and children. (ECPAT, 1999) In addition, one other point needs to be made: in all efforts to eradicate child prostitution and improve the lives of those caught within this industry, it is essential to engage in a dialogue with them and genuinely listen to what they have to tell us. (Sereny, 1985)

7. Conclusions

Taken as a whole, the information in this report generally confirms the historically-based argument of Cunningham (2000) to which I referred in the introduction, while exposing significant problems with the existing pattern of youth employment. By way of conclusion, I would like to return to the historical perspective and then suggest directions for future evolution in the economic role of children.

In a sense, the sudden appearance of children as economic actors in the industrial revolution was an illusion. Children had always worked in agriculture and home-based crafts, and their lives were often hard as a result. We should not romanticize work in the fields, nor assume that parents or other adult masters were always benign and gentle overseers. Nevertheless, the new forms of child labour that emerged during industrialization were rightfully challenged. Past dangers did not justify new ones, especially when fortunes were being made at the expense of children's lives. The new employments, moreover, were in sectors of the economy whose technologies were evolving rapidly; there was no excuse for the failure to use these technologies in the interest of workers' health and well-being. The new stress on education was also justified: with the growth of new industries and occupations the need for children to acquire an education became more pressing, especially for the poorest children whose hours and conditions of work were the most exacting. Finally, adult workers in the trade union movement were rightly concerned about the importation of children by employers into activities central to the economy. Such jobs should be available to adult workers, and their rising productivity should translate into rising pay. The vulnerability of children should not be used as a lever to undermine the bargaining power of their parents.

For the reasons outlined in Section 2, all of the countries surveyed in this report took action — some sooner, some later — to end these abuses. At the level of rhetoric and perhaps aspiration, a new idea took hold, vividly described by Viviana Zelizer in her influential book, *Pricing the Priceless Child*. (Zelizer, 1985). Childhood became “sacralized”; the precious time available to children, it was thought, should not be dissipated on work. Children should study and play; child labour is barbaric. But how could this notion be reconciled with the continued belief that work, even for young children, builds character and sound economic judgment? One solution was to return, in a way, to the preindustrial value of child work within the family. The work that was thought most suitable for children was in the home, preferably unpaid. With this new framework — child labour that was economically marginal and family-centered — industrialized societies came to believe that the problems of an earlier era were solved, and increasingly stopped paying attention to, and measuring, the work of their youth.

The evidence we have surveyed shows that the true shift in youth employment was different, however. Children did work within the household and the family enterprise, but they also increasingly took on paid jobs that were available to them. In general, the jobs they could get were those organized on the model of secondary employment: seasonal work, unskilled work, part-time and temporary work, and work with little attachment to or investment in the worker's future. Such jobs were most often found in the service sector, including trade, but secondary

jobs exist in all sectors, and so do child workers. Meanwhile, as the consumer interests of teenagers were stimulated, young people felt an added need to earn income independently of their families.²⁸ Thus, unlike their work during the industrial revolution, the income they earned was not earmarked for general family expenses — quite the opposite.

To the extent that this story of a gradual shift from one pattern to the next is correct, certain implications can be drawn. First, while it is important to monitor the overall level of children's economic activity, the quantity of this activity is not the main issue. What matters is the nature of this work, and what effects it has on those who supply it, their families, and their communities. Second, I believe that abolition of all or even most forms of child work is neither realistic nor desirable; rather, the goal should be to expand the opportunities children have for a variety of healthy and fulfilling economic activities, while taking into account the effects of work on their future education and development. In this it is necessary to be guided by what children themselves tell us they want and need. (Levison, 2000) Third, I feel we need to adjust the legal framework of child labour to the legitimate desires of children, their families, and the larger society. To say that most child work is illegal — which it is — is also to say that most working children and their employers, as well as friends and family members who are aware of their activities, actively flout or ignore the law. This in turn suggests that the law cannot fulfill the purposes it was designed for, since it does not command support. The breakdown of law documented in this report is a significant problem, since there are still many abuses of children's vulnerability in employment, and our societies need effective legal remedies. Perhaps we should take a closer look at strategies of positive reinforcement for good youth employment as well as sanctions against the bad, as recommended in National Research Council (1998).²⁹ Finally, it is essential to recognize that the majority pattern does not describe the experience of every child worker. Far too many still battle the “old economy” threats of poverty, severe exploitation, and unacceptable risk. The approach that works best for young workers in the world of relatively affluent employment will generally not be appropriate for children in the “first world's third world”.

At various points in this report I have circled issues that require further investigation. I would like to take them up briefly at this point, recognizing that the purpose of this study is to identify problems and not solutions.

1. Child work and education. As mentioned earlier in the report, there has been a heated debate in the United States and England over the risks that extensive teenage work hours pose to success in school. I have not weighed the evidence, nor is any judgment on this issue directly relevant to the mandate of Convention No.182, although it is certainly in the spirit of Convention No.138. The only point I would emphasize here is that it is important not to lose sight of the situation faced by poor and marginalized youth: farmworkers, immigrants, and those whose poverty places them on or near the street. Their right to an education is at risk because of their larger social and economic hardship, and this signifies that the struggle for universal education is not over. For those youth whose education is imperiled by to a too-soon, too-great immersion in the attractions of the consumer society, on the other hand, it is likely that the best remedial action is at the family, school, and community level, rather than at the level of national labour market regulation.

2. Construction. This report provides sufficient evidence to demonstrate that construction, which is one of the most dangerous sectors for adults, is literally doubly dangerous for children. Why then do children work in it? The answer appears to be that construction is conducive to children's employment due to its sporadic and economically fragmented character; that is, children work in construction essentially for the same reason they work in restaurants or retail stores — the work can fit into summer schedules and can accommodate the casual labour force attachment of youth. This is a reason, but it is far from a justification. As it now exists, and based on the technologies currently available to it, construction is intrinsically dangerous and cannot be made acceptable employment for youth. Hence, it is a recommendation of this report that construction should be viewed as work which jeopardizes the health of young people in the context of Article 3 of Convention No.138. There should be further study of the factors that have made this industry so dangerous for its youngest workers, but in the meantime we should seek to dramatically reduce construction's employment of teenagers.

3. The problem of secondary employment. Children will continue to work in secondary jobs, but such jobs tend to have poor working conditions. In the end, this is not primarily a problem of youth employment, but of devising new approaches to health and safety policy in this portion of the economy. One idea that can be imported from regional development policy is to look for opportunities to pool the needs and resources of small businesses to achieve economies of scale and make possible investments they could otherwise not afford. In particular, this should be considered for training. It may be uneconomic for small enterprises to mount their own training programmes, but they could be organized and encouraged through subsidies to share these costs. Of course, among the training objectives would be training in occupational safety and health. Also of concern, however, is the increasing centrality of secondary work within some of the developed economies, such as the United States and Great Britain. As more tasks fall under the domain of contingent employment relations, adults will increasingly find themselves in labour market competition with children. It is possible that we will see mounting pressure to restrict child labour on these grounds alone. While it is not difficult to sympathize with adults trying to strengthen their employment rights, I am reluctant to endorse restrictions on work which does children no particular harm. Instead, I believe the main effort should go into enlarging the share of employment which is based on long-term relations, investment in workers' skills, and the entire panoply of ILO conventions and recommendations. The problem is excessive casualization of labour, not the (young) casual workers themselves.

4. Family work. The available evidence does not support the notion that work for family businesses is better for children, but rather that it is exactly in this least-regulated portion of the economy that the risks to young workers are greatest. While it has to be recognized that enforcing regulations in this context is difficult at best, it is not a good idea to exclude family businesses from regulation altogether. Perhaps, rather than proposing to extend the reach of government agents to the family domain, thought should be given to how the teenage workers themselves could become more effective advocates for their own safety.

5. Workers compensation. Although the system of health and safety regulation receives the most attention in discussions of injury and fatality prevention, in fact, in all the countries under

consideration in this report, the largest and most consequential programme is workers compensation. This not only provides benefits to workers, but also structures the financial incentives firms face to improve working conditions. Evidence that workers compensation does not meet the needs of young workers should be taken seriously. Further research is required into the reasons for the failure of children to take advantage of the claims process, so that better coverage can be secured in the future. In addition, the educational costs of serious injuries to children should be taken into account, and employers should be asked to recompense a portion of this burden.

6. Agriculture. Rates of fatal and nonfatal injury among child workers in agriculture are unacceptably high. Of course, the first response should be to make this work safer for all who do it, young and old. But it may not be possible to bring all aspects of agricultural work up to a safety standard appropriate for children in the short run. In that case, the apparent legal preference for child agricultural work should be reconsidered. Thus, developed countries should look once again at the appropriateness of exempting agriculture or certain forms of it from minimum age requirements as allowed by Article 4 of Convention 138. Particular hazards, such as those associated with tractors and other heavy equipment, could be targeted. Above all, children should not be forced by poverty to give their childhoods over to unrelenting labour in the fields — certainly not in countries that can afford to provide for them.

7. Prostitution. As discussed in the previous section, policy toward child prostitution must walk a fine line. Where prostitution is criminalized, children must be exempted, and where prostitution is tolerated, the prostitution of children ought to be an exception. How these distinctions can be made in practice is, of course, far beyond the scope of this report. Nevertheless, the evidence surveyed here demonstrates that child prostitution is not a minor problem; indeed, it may, along with sexually transmitted diseases, be the most seriously problematic aspect of the entire question. Given the role that being on the street serves as a vehicle for delivering children to prostitution, preventive efforts will have to focus on this population. Perhaps if more effective social service provision can be extended to street children, there will be less transition to prostitution.

8. Role of the schools. Scattered in secondary jobs and family enterprises, child workers are often difficult to reach — as workers. They are far less difficult to reach as students. There are many ways school programmes can serve the objectives of Convention 182 in particular, especially in the realm of promoting safe and healthy work. (a) Schools can perform at least some of the occupational safety and health training that employers fail to offer. (b) Schools can offer classes that inform students of their rights as workers, including wage and hour standards, association and collective bargaining, health and safety protection, and workers compensation. (c) Schools can provide counseling and advocacy services to students whose jobs are causing them social, economic, or health problems. (d) Schools can supplement the often impoverished content of secondary jobs with opportunities for academic reflection, much as in an internship. Students should be encouraged to share their work experiences with one another and consider alternative ways their own work might be managed to achieve economic, health, and social goals. (e) Schools can attempt to intervene positively in the lives of students at particular risk of

entering prostitution, bearing in mind that such interventions should be supportive and not punitive.

These are quite general recommendations; nothing more detailed can be justified by the findings in this report. Nevertheless, taken together they indicate that the developed countries have not relegated all the evils of child labour to their distant past, nor do they hold up a model for developing countries to uncritically emulate. In particular, the mandates of Conventions No. 138 and 182 on the implementation of minimum age regulations and in the areas of hazardous work and the sex trade are not yet fulfilled. Child labour, we have discovered, is not simply a phase that a society passes through on its way to something else. It has been and remains a significant element of economic and social life, and one whose positive aspects are difficult to secure. It will take a general social effort, encompassing government regulation, schools, families, and workplaces to make our children's work an opportunity rather than a threat to their well-being, and the first step must be to speak honestly of the extent of this work and the goals we set for it.

Notes

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1. The latter is moot insofar as the developed countries are concerned since it stipulates that only *forced* or *compulsory* military service is at issue. No developed country with a system of military conscription has adopted a mandatory age of service below 18.

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2. This account of child labour in British history draws primarily on Fyfe (1989) and Cunningham (2000).
 3. A hazardous order designates particular industries, occupations, or activities as prohibited for children under a specified age.
 4. If anything, this understates the importance to teenagers of securing their own source of income. See the interview excerpts reproduced in National Research Council (1998).
 5. “Youth labour has indeed been typified historically by its cheapness, disposability and relative tolerance of boring and unrewarding tasks, characteristics increasingly important to large sections of the contemporary labour market.” (Mizen et al., 1998)
 6. The usual assumption in such models is that, with the capital stock held constant, the marginal product of each type of labour increases as the amount of such labour employed decreases—the principle of “diminishing marginal returns against a fixed factor”.
 7. Figure 1 also denies most of the arguments made concerning the potentially negative impacts of child labour on children. (1) It assumes that the supply curve for child labour reflects the true cost of having children work rather than do something else, including the cost to educational opportunity. (2) It assumes, as will be mentioned shortly, that children are not subject to differential exploitation by employers. (3) It assumes that jobs with substandard working conditions provide above-standard benefits in other respects, so that overall W , understood as everything the worker receives for working (wages, working conditions, on-the-job training or promotion opportunities, etc.), remains at its market-clearing level. In other words, all costs and benefits of work are either directly economic or have been translated into economic quantities, like wages, through the operation of the market. There are no unmeasured issues of culture, health, psychosocial development, family life, etc. Economists abstract from these questions by habit, but they are central to the general public’s approach to child labour, as we have just seen.
 8. In the world of Figure 1, of course, there is nothing to bargain over; it is in the interest of employers to offer W_1 in a free market and in the interest workers to accept it.
 9. It is interesting to note that the political will to take decisive action against child labour has been greater during periods of unemployment, as evidenced by the British legislation of 1933 and the US Fair Labour Standards Act (FLSA, which codifies federal minimum age and hazardous orders regulation) of 1938. By contrast, Hobbs and McKechnie mention that British regulation was informally suspended during the two world wars, when labour shortages rather than surpluses were paramount.
 10. The modern debate on the meaning of “childhood” was initiated by Aries (1962); for more recent views, see Allison et al. (1998). Generally speaking, social scientists believe that childhood is a socially constructed category rather than a “natural” or biologically determined phase of life.

11. Here again, we can perhaps see an echo of the longstanding trade union position that adult employment standards should not be undercut by competition with children—an argument that tends toward abolitionism.

12. It should also be noted in this context that “work” does not have to mean paid employment. When children assist their parents in market activities, even without remuneration, this too is work. Unpaid work of this sort plays an important role in agriculture and small family businesses. I am excluding general household upkeep, however.

13. Note that minor differences between the two datasets for the 15-19 age group can be explained by differences in reference year and between employment versus economic activity rates.

14. See the literature review in National Research Council (1998), which recommends a maximum of 20 hours per week for teenage students. Schoenhals et al. (1998) disagree, and argue that the endogeneity of teenage work decisions was not sufficiently taken into account in the literature on which the NRC relied.

15. Unfortunately, the Labour Department did not report any dispersion measures for either the NLSY or CPS samples, making it impossible to estimate the number of students working more than the 20-hour cutoff recommended by the National Research Council. Castillo, Davis, and Wegman (1999) cite a US survey in which 17.9 per cent of high-school students reported working more than 20 hours per week during the school year.

16. Sweatshops are defined as workplaces operating outside, and usually under, legal standards for wages, hours, and conditions of work.

17. A related problem is posed by the possibility that some parents may use home-schooling as a means to exact more hours of work from their children in violation of mandatory education requirements. There has been an increase in the use of home-schooling, but abuses of this sort are, for now, purely conjectural.

18. It is important to bear in mind that the number of fatal injuries is approximately a tenth the number of fatal occupational diseases, although there are no accurate measures of the latter in any country. It is reasonable to suppose, however, that relatively few deaths at work among children are due to disease.

19. For extensive documentation supporting the claims in this paragraph, see Leigh et al. (1996).

20. A study using the same methodology was published by NIOSH (1995) using 1992 surveillance data. They came to a point estimate of just under 200,000 young workers injured that year.

21. According to the US Department of Labour (2000), half the teenage workers surveyed believed they were not covered under Workers Compensation, a percentage far greater than actual noncoverage.

22. Sosin (1997) also points out that Workers Compensation, because it is an exclusive remedy, obviates payments to children or their families that could otherwise be levied against firms that violate child labour laws when an injury results.

23. This 1:3 ratio is an average across sectors. In all probability, the ratio is higher for the most dangerous jobs and lower for the least dangerous. Thus, the disparity in frequency of ED visits across industries may overstate the degree of variation for injuries in general.

24. Tucker (2000) cites estimates by the United Farmworkers Union that there are four million agricultural workers in America, of which 800,000 are children.

25. It is difficult to generalize about the relationship between farm work and enforcement of mandatory education, since, in the U.S., each state sets its own regulations for minimum school-leaving age, exemptions, etc. In addition, migratory farmworkers' access to public education has been problematic.

26. The United States Government does not feel bound by Convention 182 to take such measures. In presenting the Convention to Congress for ratification, President Clinton included the following clarification: "The United States understands that Article 3(d) of Convention 182 does not encompass situations in which children are employed by a parent or by a person standing in the place of a parent on a farm owned or operated by such parent or person." (Dennis, 1999, pp. 96-7)

27. The Council of Europe (1997) found reason to be concerned about the health and safety of child agricultural work in Britain.

28. An independent source of income also improves children's status and bargaining power within the family. The logic parallels that for wives; for a review of the economics literature on bargaining within the household, see Lundberg and Pollak (1996).

29. This report suggested setting up a programme to certify and recognize "meritorious" employers of youth. Such recognition would have beneficial labour market effects, and employers would probably seek to qualify. This would encourage greater use of already-existing public training and support programmes aimed at small and medium-size enterprises.