

Hemmer, Hans-Rimbert; Steger, Thomas M.; Wilhelm, Rainer

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JUSTUS-LIEBIG-UNIVERSITÄT GIESSEN
Professur für Volkswirtschaftslehre und Entwicklungsländerforschung
(Institute for Development Economics)

Prof. Dr. Hans-Rimbert Hemmer

D-35394 Giessen/Germany • Licher Str. 66

Tel: ++49-(0)641-99-22200 • Fax: ++49-(0)641-99-22209 • E-mail: www-vwl6@wirtschaft.uni-giessen.de

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**Child Labour and International Trade:
An Economic Perspective***

by

Hans-Rimbert Hemmer

Thomas Steger

Rainer Wilhelm

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I. INTRODUCTION

(1) Child labour is a widespread phenomenon. Although economic activities of children have been commonplace even before the industrialisation, it has in the meanwhile become a lasting symbol of the industrial revolution and of industrialisation in general. In most countries the inclusion of children in the labour force is legally restricted. Nevertheless, economic activities of children, most of these within their families, continue to be an everyday feature of economic development, especially in the poorer countries. Beside cultural or social factors, these economic activities are mainly determined by economic forces. Hence, economic conditions most likely play a fundamental role in explaining child labour. Economic development trends which change the economic conditions therefore influence the extent of child labour.

(2) There are two important development trends concerning international trade in the last years: the globalisation of markets and the formation of regional trading blocks. The aim of this paper is to shed light on the relation between these changes in the economic environment and child labour. Furthermore, the issue of restricting international trade to reduce child labour is discussed in order to derive some policy recommendations. This field is often subject to an emotional "crossing of swords" of competing interest groups. An economic line of reasoning is expected to provide important arguments in the negotiations about social and labour standards in international trade which should not be overlooked.

(3) The structure of this paper is as follows: An empirical and theoretical foundation, which is necessary for any fundamental discussion of the subject, will be outlined in chapter II. The potential impact of recent trends in international trade on child labour is discussed in chapter III. Chapter IV contains an evaluation of currently proposed interventions to reduce and eliminate child labour and chapter V presents some policy recommendations. The final chapter contains some concluding statements concerning the debate about the role of labour standards in international trade.

II. FOUNDATIONS

A. Definition and Forms of Child Labour

(1) The analysis of child labour makes it necessary to define the object of investigation. The definition of "child", however, differs widely between and within societies (as well as within the scientific community). In many societies, particularly in the poorer ones, cultural and social factors are often more important than the age in determining the social status of a child.¹ Hence, a generally valid boundary between childhood and adulthood cannot be drawn. For practical purposes, therefore, an operational definition has to make use of an age criterion. Convention No. 138 of the International Labour Office (ILO) sets 15 years as the age limit for participation in economic activities (with some exceptions for children aged 13-14 years that are engaged in "light work").² This age limit will be taken for the purpose of the following analysis.

(2) In most studies, only activities of children in the labour market are classified as "child labour". The assistance of children within the family economy is either omitted or called "child work". To discuss the economic dimension of children's activities in detail "child labour" should comprise all non-educational and non-leisure activities of children, regardless of whether such activities are paid or unpaid, formal or informal, within or outside the family, at home or outside.³ In total, for the present purpose child labour is defined as all economic activities performed by human beings below the age of 15 years.⁴

(3) Within the scope of child labour the employment status of children is of major interest. The following forms can be distinguished:⁵

- *wage labour* (wage earners paid time or piece rates);
- *work within a family enterprise* (with or without any direct remuneration);

¹ Childhood can be interpreted as a process of socialisation, "*which gradually introduces the child into work activities and teaches the child survival skills.*" Grootaert, C. / Kanbur, R. (1995), p. 3.

² International Labour Convention No. 138 and Recommendation No. 146 concerning Minimum Age for Admission to Employment.

³ Following Gronau, the distinction between work (i.e. production time) and leisure (i.e. consumption time) can be drawn by defining work (even at home) as "*something one would rather have somebody else do for one (if the cost were low enough), while it would be almost impossible to enjoy leisure through a surrogate.*"; Gronau, R. (1977), p. 1104.

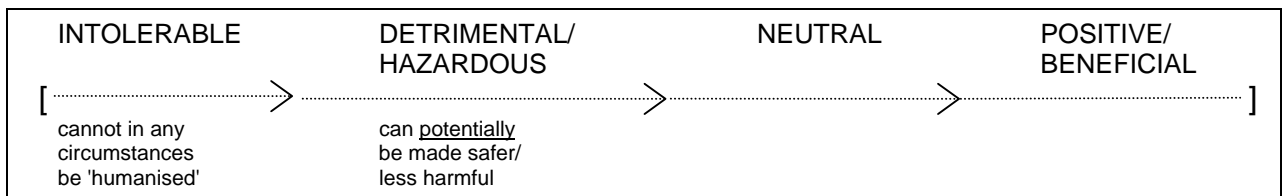
⁴ Admittedly, formal and informal schooling (i.e. calculated investments in human capital) might be classified as a form of work since it contributes to production in future periods. However, it seems proper to distinguish between those activities that may increase income or wealth in the present and those that may have similar effects in the future. In any case, the time allocation decision of children with respect to current production, human capital formation and leisure is a simultaneous one.

⁵ Most of these economic activities can be either determined by the children themselves or by adults (usually their parents).

- *household work* (with or without any direct remuneration);
- *assistance* (children assisting an adult worker who in turn works for an employer);
- *apprenticeship* (children on a training programme or children officially registered as such);
- *self-employment* (children who work on their own account);
- *forced work* (child bondage, child slavery).⁶

(4) White (1995) distinguishes four principle possibilities of consequences of children's economic activities on their physical and social development within a continuum of child labour situations, as shown in Figure 1.

Figure 1: A Continuum of Child Labour Situations



Source: White, B. (1995), p. 13.

Most forms of child labour cannot be assigned *a priori* to either of these categories. Whether some activity is judged to be harmful or beneficial to the child depends on the specific circumstances of the activity as well as on the personal view of the observer.⁷

B. Extent of Child Labour: Empirical Findings

(1) Existing statistical information on the global extent of child labour is grossly deficient and estimates vary widely. According to Table 1 there were about 78.5 million economically active children world-wide in 1990. Most of them live in the Less Developed Regions (LDRs)⁸; only a very small proportion has been registered in More Developed Regions (MDRs)⁹. The global extent of child labour decreased between 1980 and 1990 in absolute terms. The share of the

⁶ Some forms are adopted from Mendelievich, E. (1979).

⁷ Note that what children perceive as positive or beneficial to themselves might be intolerable from the point of view of the adults, et vice versa. Additionally, parents can be expected to judge the work of their own children in a different way than other adults would do.

⁸ LDRs comprise all regions of Africa, Latin America, Asia (excluding Japan) and Oceania (Melanesia, Micronesia and Polynesia).

⁹ MDRs comprise North America, Japan, Europe, Australia / New Zealand and the former Soviet Union (Ex-USSR).

LDRs, though already very high, however, increased even more from 99.7 percent in 1980 to 99.9 percent in 1990.

Table 1: *Regional Distribution and Sex Ratios of Economically Active Children under 15 Years, 1980, 1985 and 1990.*

Regions	1980				1985				1990			
	Total ('000)	Region as % of world*	Sex ratios		Total ('000)	Region as % of world*	Sex ratios		Total ('000)	Region as % of world*	Sex ratios	
			Male	Female			Male	Female			Male	Female
World	87867	100.0	56.9	43.1	80611	100.0	57.5	42.5	78516	100.0	58.6	41.4
Africa	147950	17.0	61.7	38.3	14536	18.0	59.2	40.8	16763	21.3	62.1	37.8
Americas	4122	4.7	69.4	30.5	4544	5.6	70.5	29.4	4723	6.0	69.6	30.3
Asia	68324	77.8	55.1	44.9	61210	75.9	56.1	43.9	56784	72.3	56.6	43.4
Europe	294	0.3	57.8	41.9	145	0.2	56.8	43.9	90	0.1	57.9	43.2
Oceania	177	0.2	57.1	44.6	176	0.2	55.1	43.8	157	0.2	56.1	43.9
Ex-USSR	0	0.0	0.0	0.0	0	0.0	0.0	0.0	0	0.0	0.0	0.0
LDRs	87573	99.7	56.9	43.1	80466	99.8	57.5	42.5	78427	99.9	58.6	41.4
MDRs	294	0.3	57.8	41.9	145	0.2	56.8	43.9	90	0.1	57.9	43.2

* Due to rounding, totals may not be equal to the sums of their constituent components.

Source: Ashagrie (1993), Table 2 and 3.

(2) Child labour is concentrated mainly in Asia (72.3 percent in 1990) and in Africa (21.3 percent). While in Asia the absolute number of working children decreased significantly, in Latin America the amount of child labour seems to increase (probably due to relatively high population growth).¹⁰ In Europe (0.1 percent) and in Ex-USSR (0.0 percent) it is reported to be (nearly) non-existent.¹¹ Generally, child labour seems to be a phenomenon primarily of the poorer regions. The data show that in all regions there are more boys than girls among the economically active children. This is especially true for Latin America, where about 70 percent of the working children are reported to be male.

(3) More important than the regional distribution of child labour in absolute terms is the distribution of the Labour Force Participation Rate (PR) of children. The data documented in Table 2 cover children aged 10-14 years. On average 13.7 percent of the children participate in economic activities world-wide. The PR varies between 0.1 percent in MDRs and 16.7 percent in

¹⁰ For North America the ILO-data do not indicate any incidence of child labour; see Ashagrie, K. (1993), Table 3.

¹¹ This implies that the data should be interpreted very carefully, since especially in economies in transition, such as East European countries or the countries of the former Soviet Union, a significant amount of child labour is likely to exist.

LDRs and is highest for Africa. In all geographic areas it is higher among boys than among girls.¹²

Table 2: *Labour Force Participation Rate (PR) of Children 10-14 Years Old in 124 Countries and Territories, 1990, by Major Geographical Area and by Sex.*

Major geographical areas	Both sexes* PR percent	Male* PR percent	Female* PR percent
World	13.7	15.7	11.5
Africa	22.0	26.8	17.0
Americas	7.9	10.8	4.9
Asia	15.3	16.8	13.6
Europe	0.3	0.3	0.2
Oceania	6.9	7.6	6.5
Ex-USSR	0.0	0.0	0.0
LDRs	16.7	19.1	14.1
MDRs	0.1	0.1	0.1

* Due to rounding, totals may not be equal to their constituent components.

Data: (i) Returns of a special ILO questionnaire sent to more than 200 countries and territories in April 1992, (ii) LABORST (STAT database), (iii) preliminary ILO estimates and projections of economically active population and (iv) United Nations Population Division, Sex and age distribution of the world's populations: The 1992 revision (1950-2025), New York 1992.

Source: *Ashagrie (1993), Table 4.*

(4) In a sample of 13 countries the ILO found evidence that, concerning the employment status of children, paid work seems to be dominant (see Table 3).¹³ Only a very small proportion (0.7 percent) was classified as "independent workers" (without any difference between boys and girls).¹⁴ In the category of "unpaid family workers" the incidence was higher among girls (16.1 percent) than among boys (11.4 percent).

¹² One explanation for this may be, among others, the tendency that assistance of children in the household (usually performed by girls) is often not interpreted and hence not reported as child labour.

¹³ Note that in nearly half the cases (47.8 percent) the employment status could not be classified.

¹⁴ This is probably due to the fact that self-employed children (usually engaged in informal activities) have hardly been covered by official statistics.

Table 3: *Economically Active Children under 15 Years, in 13 Countries, 1990, by broad Status in Employment and by Sex.*

Broad employment status	Both sexes*		Males*			Females*		
	Total ('000)	As % of total	Total ('000)	As % of total male	As % of both sexes	Total ('000)	As % of total female	As % of both sexes
1. Paid workers / employees	5923	38.2	3540	38.8	59.8	2383	37.2	40.2
2. Unpaid family workers	2068	13.3	1040	11.4	50.3	1029	16.1	49.8
3. Independent workers	105	0.7	62	0.7	59.0	42	0.7	40.0
4. Not classified by status*	7427	47.8	4473	49.1	60.2	2957	46.1	39.8
TOTAL**	15523	100.0	9112	100.0	58.7	6411	100.0	41.3

* Includes unpaid family workers, self-employment/independent workers, employer members of producers co-operatives, first-time labour market entrants.

** Due to rounding, totals may not be equal to the sums of respective components.

Data: Country returns of a special ILO questionnaire sent to more than 200 countries and territories in April 1992.

Source: *Ashagrie (1993), Table 8.*

(6) The data should be interpreted with caution, since they are rudimentary and may be biased significantly. The entire phenomenon has not been covered since (i) statistical methods are imperfect and vary between countries, (ii) not all countries presented the relevant data and (iii) not all economic activities of children are counted.¹⁵ Therefore the aggregates are likely to underestimate the real magnitude of child labour. Though not counted by its own statistics, even the ILO admits that there are up to 200 million working children in the world today.¹⁶

(7) The empirical dimension of the phenomenon of child labour can in brief be characterised by the following "stylised facts":

- Child labour is above all predominant in poor regions. However, not all poor regions have a high incidence of child labour.
- Boys are reported to be generally more involved in labour market activities, while girls mainly work within the family.
- Only a few of the working children are independent workers or self-employed. This indicates that usually the decision to supply child labour is made within the family.
- Most children work in their families or in the informal sector, where legal restrictions either do not exist or are hard to enforce.¹⁷

¹⁵ Household work as well as other informal activities are often omitted.

¹⁶ See ILO (1995a).

¹⁷ Of course, the informal sector as well as the family is not free of regulation. There are several informal constraints (social norms, tabus etc.) that structure economic behaviour and are effectively binding for the actors (in much the same way or even more as compared to the law in formal market relations).

- The majority of child workers is employed in agriculture (77.0 percent); only a small proportion works in manufacturing (9.8 percent). In general, other sectors are reported to be quantitatively negligible.¹⁸
- The proportion of working children employed in the export sector is generally very low (about 5-7 percent)¹⁹, but may differ significantly between countries.

(8) Though not indicated by the data, children are likely to work throughout the world - even in the richest countries. However, the nature and causes of child labour in countries or regions at different stages of development may differ significantly.

C. An Economic Approach to Child Labour

(1) The aim of this chapter is to provide a theoretical explanation of the phenomenon "child labour". We assume preferences to be stable over time as well as rational behaviour of the decision makers. Decision makers choose from a set of actions those which are likely to maximise their "well being" or "utility" subject to several constraints.²⁰ According to the economic approach human behaviour can be explained by analysing the preference structure and the economic environment, including relative prices and income.

(2) Economic activities of children can largely be explained by analysing fertility and time allocation decisions.²¹ The more children living in one family, the higher the probability that they (or some of them) will take part in economic activities. Additionally, for a given number of children the decision of the family or of the child itself on how to allocate each child's time to economic activities on the one hand and education and leisure on the other, determines the extent of child labour. The following chapter presents a typology of child labour that seems to be appropriate in this context.

¹⁸ See Ashagrie, K. (1993), Table 6.

¹⁹ See Grimsrud, B. / Melchior, A. (1996), p. 2 and p. 9.

²⁰ This assumption seems to be a realistic description of human behaviour as far as economic aspects are concerned.

²¹ An economic analysis of fertility decisions assumes that parents can effectively control the number of children. This assumption clearly is sometimes not realistic but becomes more appropriate as means of contraception are available.

1. A Typology of Child Labour

(1) The expression "child labour" was defined as *all economic activities performed by human beings below the age of 15 years*. A theoretical explanation of the phenomenon should concentrate on typical forms of child labour. Thus, it is necessary to formulate a typology of child labour by using economically meaningful criteria for distinguishing different forms of child labour. For our purpose we have to differentiate between

- the relevant decision maker (adults/parents vs. child)²² as well as between
- the form of economic relation or activity (market vs. non-market).

(2) If both criteria are combined, the following types of child labour can be distinguished:

Figure 2: A Typology of Child Labour

	Family Decision	Child Decision
Non-Market Activity	<p>Work within the family economy</p> <ul style="list-style-type: none"> • household work • work within a family enterprise • assisting parents in market activities 	<p>Self-determined work</p> <ul style="list-style-type: none"> • within a "single-person household" • within a social unit (e.g. family)
Market Activity	<p>Wage labour (including apprenticeship)</p> <p>[Forced work]</p>	<p>Wage labour (including apprenticeship)</p> <p>Self-employment</p>

This typology serves as a framework for the following discussion concerning the economic rationality of child labour. It seems important to stress the main point of this approach, which is the distinction between family and child decisions: the reasons leading to economic activities of children are fundamentally linked to the decision structure within the social unit the child lives in. In order to analyse the causes of child labour, a formal model is outlined in the next chapter, which can be employed to discuss several changes in the economic environment.

²² Family decisions are generally made by adult household members. Economic activities based on a child decision mostly apply in the case of street children. The empirical importance of street children in selected countries is discussed in ILO (1996), p. xv, pp. 61-66.

2. A Basic Model

(1) The model is a modification of the well known "*household production function approach*" formulated by Gary S. Becker.²³ According to this approach households try to maximise their welfare or utility, which depends on the amount of several "*commodities*".²⁴ The term "commodity" is defined broadly in order to include such objects as a composite consumption commodity representing the "standard of living", the number of children, the educational services consumed by the children as well as the children's leisure. These commodities are "produced" by the household using two forms of inputs: purchased market goods and the time of the household members. That is, households are regarded to be multi-personal economic units which are both consuming and producing.²⁵

(2) Formally the household's utility depends on the commodities "standard of living" (S), the number of children (N), the educational services (E) and the children's leisure (L):

(a) $U = U(S, N, E, L)$.

The commodities are produced according to the following production functions:

(b) $S = S(X_S, T_{AS}, T_{CS})$,

(c) $N = N(X_N, T_{AN})$,

(d) $E = E(X_E, T_{CE})$,

(e) $L = L(X_L, T_{CL})$.

The standard of living is produced using a purchased market good (X_S) as well as the parents' and the children's time (T_{AS}, T_{CS}) as inputs.²⁶ The number of children as well as education and leisure are "produced" using market goods (X_N, X_E, X_L) and the time of parents and children (T_{AN}, T_{CE}, T_{CL}), respectively.

²³ See Becker, G. (1965); Becker, G. (1981); for an application on questions concerning child labour see Rosenzweig, M. / Evenson, R. (1977); Nardinelli, C. (1990).

²⁴ The same is true for an individual, which can, in fact, be regarded as a single-person household.

²⁵ Because of the production activities performed by households, they can be labelled as "little factories".

²⁶ In the case of extended families the time of related adults as an input of production in (S) has to be considered.

The scope of action is restricted by two constraints: The *income constraint* states that the household's expenditures must be equal to the household's money income in each period.²⁷ According to the *time constraint*, the total time which is devoted to several activities, must equal the entire time available for each individual. In the case of children the time constraint is as follows:

$$(f) \quad T_C = T_{CW} + T_{CS} + T_{CE} + T_{CL}.$$

That is, the children's whole time can be devoted to wage labour (T_{CW}), home work (T_{CS}), education (T_{CE}) and leisure (T_{CL}). The income constraint and the time constraint can be combined to get the "full income constraint". The full income can be interpreted as the household's money income if all time available to the members of the household is devoted to wage labour:

$$(g1) \quad I = T_A w_A + T_C w_C,$$

$$(g2) \quad I = \pi_S S + \pi_N N + \pi_E E + \pi_L L.$$

Equation (g2) shows that the full income " I " can be used to obtain the four commodities S , N , E and L . The π_S, π_N, π_E and π_L denote the "*shadow prices*" of the four commodities, respectively. In order to calculate these shadow prices two aspects have to be registered:

- The *costs of the market goods* used as inputs and
- the *opportunity costs of the family member's time*²⁸ which is used as input likewise.

In the case of the shadow price of children, the economic contribution per child to the family's full income has to be subtracted to get the "net cost of children". The shadow price of the educational services per child, for example, can be expressed as follows:²⁹

$$(h) \quad \pi_E = P_E \frac{X_E}{E} + w_C \frac{T_{CE}}{E}$$

In (h), p_E is the price of the market good used in the production of E and w_C is the child wage rate. According to the utility maximising behaviour the amount of each commodity produced and

²⁷ To simplify matters, the possibility of saving is neglected.

²⁸ The opportunity costs in this context is the wage income which cannot be realised because the family member devotes a part of his time to the production of a commodity instead of working.

consumed is strongly related to its shadow price; the higher the shadow price, other things equal, the lower is the amount demanded. The maximisation of the utility function subject to the full income constraint leads to a set of first order conditions, which imply that the following equation holds:

$$(i) \quad \frac{U_i}{U_j} = \frac{\pi_i}{\pi_j}.$$

The ratio between the marginal utilities of two different commodities equals the ratio of the two corresponding shadow prices.

(3) The model's economic logic can be illustrated by discussing the effects of a change in the wage rates, the prices and the money income:

(a) An increase in the adult's wage rate has two opposite effects:

- First, a rise in the adult's wage rate increases the opportunity costs of the adult's time. Because child rearing is a highly time intensive activity, the shadow price of children increases and thus the number of children desired decreases (substitution effect).
- Second, a rise in the adult's wage rate means a rise in the family income. If the desired number of children increases due to a rise in income, i.e. children are a normal "good", a rising income level will increase the number of children demanded (income effect).

Whether or not the substitution effect dominates the income effect is not unequivocal *a priori*. The empirical evidence suggests, however, a negative relation between the number of children and the income level.³⁰ This is supported by the fact that education seems to be a highly normal good. In this case the demand for education increases along with income. Then, the desired number of children decreases as far as the number of children and the education level are substitutes.

(b) A rise in the child wage rate or in the children's productivity doing home work increases the children's potential contribution to the family income. Thus the shadow price or the net costs of children decrease and the number of children "demanded" increases. The increasing wage rate leads to a rise in the family income and therefore increases the desired educational services as

²⁹ In the case of constant wage rates, constant commodity prices, and constant returns to scale, the average and the marginal shadow prices are identical, so that it seems to be justified to use average instead of marginal prices.

³⁰ See Hemmer, H.-R. / Bohnet, F. (1994).

well as leisure, as far as these are normal goods. Again, whether the former effect (the substitution effect) dominates the latter (the income effect) or not, is equivocal. However, because the children's contribution to the family income is mostly less than 20 percent, the substitution effect probably dominates the income effect.³¹ Consequently, the demand for educational services or leisure decreases so that child labour increases.

A rise in the child's home work productivity has the same consequences concerning the child's time devoted to education and leisure. The distinction between market and non-market activities is not essential in the context of this model. Therefore the model can be used to analyse the children's economic contribution within the household, as well as children's labour market activities, i.e. child labour supply.

(4) From an economic point of view child labour is simultaneously determined by several economic parameters. Hence, the mechanisms how changes of economic parameters affect child labour are manifold. The ultimate result of such changes can only be calculated within a fully specified general equilibrium model. However, to derive plausible implications partial analysis is applied which concentrates on the *direct* consequences of economic changes rather than on indirect effects. The direct effects of changes of main economic parameters influencing child labour are presented in Table 4. In this context, again, *substitution effect* and *income effect* can be distinguished:

³¹ See Rosenzweig, M. (1981).

Table 4: Impact of Changes of Selected Economic Parameters on Child Labour

Change of Economic Parameter	Substitution Effect*	Income Effect**
Wage rate of children (w_C) increases	+	-
Children's productivity in home production (S/T_{CS}) increases	+	-
Wage rate of adults (w_A) increases	0	-
Adults' productivity in home production (S/T_{AS}) increases	0	-
Children's productivity concerning education (E/T_{CE}) increases	-	-
Price of market goods complementary to non-economic activities (P_E, P_L) increases	+	+
Price of market goods complementary to home production (P_S) increases	-	+

(+) = Child labour increases, (-) = Child labour decreases, (0) = No direct impact on child labour

* The substitution effect only covers the *direct* impact of changes of prices or productivities on child labour.

** Income means the household's *potential* money income in real terms if all time would be devoted to wage labour ("full income").

Obviously, changes of economic parameters generally cause a change in household's "full income".³² Since education and leisure are normal goods, higher incomes imply less child labour and vice versa. The *total* effect, however, is clear only if income and substitution effect work either in the same direction, or if a substitution effect does not occur.

If, for example, the *child wage rate* (w_C) increases, income and substitution effect will have opposite signs.³³ Hence, the total effect cannot be calculated as long as the magnitude of the partial effects is unknown.³⁴ The same is true concerning a change of *children's productivity in home production* (S/T_{AS}) or of the *prices of market goods complementary to home production* (P_S).

Changes in the *economic potential of adult family members* ($w_A, S/T_{AS}$) only have an income effect since the time allocation of the household's children is not affected directly.³⁵ Clear effects will occur, for example, if the *children's productivity concerning education* (E/T_{CE}) or the *prices of market goods complementary to non-economic activities* (P_E, P_L) change.

(5) There are, however, some intertemporal aspects to be discussed additionally. Since education strongly influences the future income situation, the demand for education comprises several

³² The notion of "full income" is used according to the Beckerian framework.

³³ The effect of changes of the child wage rate on household income depends on the contribution of *each* child as well as on the *number* of children per household.

³⁴ If the *elasticity of child labour supply* is very low, the substitution effect is negligible. Generally, child labour is elastically supplied since formal constraints within the family economy or the informal sector, where most children work, do not exist. A high flexibility concerning children's labour force in turn implies that the substitution effect might be of great importance.

³⁵ However, feedback effects may cause substitution of children's time *indirectly*. These effects are omitted to simplify matters.

intertemporal aspects which are not captured by the model described above because of its static character:

- First, consuming educational services inhibits costs which occur in the present. The positive impact of education, a higher income level, arises in the future. The returns of education must therefore be discounted to get their present value. Thus, the present value of the future earnings is dependent on the household's time preference rate. It is plausible to assume that the time preference rate is negatively related to the income level. That is, the present value of future earnings, other things equal, decreases as the household income decreases. Thus the demand for education decreases.
- Second, even if the (direct and indirect) costs of schooling in the present are high, investment in human capital might be rational if the additional future income is sufficiently high. In such a case it is sensible to raise a credit to finance education in the presence. This might be impossible because of capital market imperfections such as a lack of information or uncertainty. Thus capital market imperfections can be a source of a suboptimal low level of education and a high level of child labour.

3. Outline of an Explanation

The analysis in this chapter is positive in nature, i.e. questions concerning the economic rationality of the phenomenon such as "Why does child labour exist?" are to be answered. This ought to be clearly distinguished from questions such as "What are the most promising instruments to reduce or eliminate child labour?" which depend on normative statements. This distinction is stressed here because the discussion on this subject is usually a very emotionally one.

a) *Non-Market Activities*

(1) *Family Decision*: As shown in chapter II.C.1 child labour in the form of a non-market activity based on a family decision includes household work, working on a family farm or in another family enterprise as well as assisting parents in market activities (work within the family economy). When parents decide to use the work force of their children, possibly in connection with their own economic activities, both supply and demand are determined simultaneously.

From a theoretical point of view, however, the determinants of these decisions may nevertheless be separated.

In order to explain the extent of this form of child labour it is necessary to point out the determinants governing the decisions on fertility and time allocation. The number of children, and thus the potential for child labour, depends on the shadow price or the net cost of bearing and rearing children. The lower the adult's wage rate and the higher the children's home work productivity, i.e. the potential of the children's economic contribution to the family income, the higher is the number of children desired.³⁶ Children can be regarded as a "consumption good" in the case when the costs they cause exceed their economic contribution to the family income. If the opposite is true, i.e. children create a net revenue, children can be regarded to be a "production good". This is particularly important in the case of absolute poverty. Absolute poverty is defined as a situation in which the resources available to an individual or a family are not sufficient to satisfy the basic needs. If absolute poverty is predominant and children create net revenues, the incentives for rising the number of children and thus rising the amount of resources available to the household are strong. That does not mean that the parents' decision concerning the number of children is determined only by economic variables. Social and cultural aspects surely are important, too. Nevertheless, economic variables seem to have a strong influence on to the parents' fertility decision.

The children's entire time can be allocated on the one hand to economic activities, such as wage labour or home work, or schooling time and leisure on the other hand. This time allocation decision depends on the shadow price of schooling and leisure and on the family's income situation. The higher the home work productivity, the higher is the shadow price of schooling and leisure and, therefore, the less time is devoted to that purpose. Consequently, a high level of the children's home work productivity stimulates child labour within the family. The home work productivity depends on the production technology as well as the amount of complementary resources.³⁷ Besides, if the household produces goods and services which are sold in the market, the market price of these goods will also influence the extent of child labour. The higher the market price of these goods, the higher is the value of the children's (marginal) product and thus

³⁶ These implications are supported by a number of empirical studies, which reveal a positive correlation between fertility on the one hand and the child wage rate or the home work productivity on the other; see, for example, Rosenzweig, M. / Evenson, R. (1977).

³⁷ The farm size, for example, tends to increase the potential economic contribution of children. Empirical investigations support these theoretical considerations. See, for example, Levy, V. (1985).

the incentive for using the work force of the children.³⁸ The prices of market goods needed in the creation of educational services also influence the time allocation decision. The higher the prices of those goods (transportation costs, the prices of books, schooling fees), the higher is the shadow price of educational services. Accordingly, the lower is the amount of educational services demanded. Consequently, this tends to increase the children's time allocated to economic activities. Finally, because the demand for education and leisure increases along with income, the amount of time allocated to schooling and leisure increases together with the income level. In other words, a low level of income increases the extent of child labour. This is an explanation for the widespread coexistence of absolute poverty and extensive child labour.

(2) *Child Decision*: Child labour in the form of a non-market activity which is based on the child's own decision concerns firstly self-determined work within a social unit, i.e. a family or a group of children who constitute a community as can be observed in the case of street children. Secondly, it covers economic activities of children who live on their own, i.e. economic activities within a "single-person household".

It seems possible, though empirically rarely of importance, that children decide to work within the household or the family enterprise in order to support their parents.³⁹ Non-market activities of children who live on their own mainly concern the satisfaction of their basic needs. The extent of this activity depends on the determinants of the shadow prices of those commodities which are produced in order to satisfy the basic needs, i.e. the price of the market goods, the child wage rate and the child's productivity in non-market activities. This productivity heavily depends on the children's skills and possibilities to organise some kind of division of labour.

b) Market Activities

(1) Although most working children are engaged in non-market activities, a significant proportion is employed in the labour market. In contrast to economic activities within the family this requires some kind of market relation between (more or less) independent individuals.⁴⁰

³⁸ In this case again there is an income effect, which tends to lower the extent of child labour if the rise in the family's income is sufficiently high.

³⁹ In the isolated case it might be difficult to distinguish whether children are voluntarily working within a family or are working because the parents decided it.

⁴⁰ This does not necessarily mean that the child itself is an independent subject; rather the decision-maker within the family (i.e. generally the parents) should be regarded as independent or autonomous. Since the children probably cannot dispose of the payments the market relation can best be seen between decision-maker and employer rather than between child and

Therefore, in the context of market activities of children it is appropriate to consider the determinants of child labour supply and demand in turn.

(2) *Child Labour Supply*: According to the typology introduced above, a distinction has to be made concerning the subject that makes the decision (family versus child decision). In the case of children living within their family, usually adults (e.g. the parents or some other decision-maker) will decide the extent of the children's labour supply in the market. With respect to the employment status economic activities of children in the labour market can result either in wage employment or in forced work.⁴¹ But why is the work force of children to some extent supplied in the labour market instead of within the family economy?

The main reason is the expectation of a relatively high wage rate compared to the productive potential of employment within the family economy. Empirical evidence, however, indicates that wages of children are relatively low compared to those of adults (due to market discrimination).⁴² Assuming that there is no discrimination within the family, it seems more likely that adults seek employment in the labour market instead of their children, in order to maximise joint wealth.⁴³ The argument implies that adults have some comparative advantage over children in the labour market. However, the larger the family the more likely adults are occupied with child rearing. Hence little (or no) time is left for market activities. To afford all essential commodities that can be purchased in the market, the income of adult family members possibly will not be sufficient. For that reason the children's work force (at least partially) has to be supplied in the labour market to increase cash income.

Child labour seems to play a significant role in the self-insurance strategy of poor households ("income insurance argument").⁴⁴ Faced with poverty, households often cannot afford an interruption of their income stream since they usually have no liquid assets and no access to capital markets to compensate current income losses.⁴⁵ The risk of income variability or

employer. In both cases the labour force of the children is sold and a "compensation" is made in favour of the decision-maker.

⁴¹ Forced work can surely not be analysed in terms of economic rationality, since there is no bargaining process between independent subjects to which the economic approach is applicable. However, the reasons leading families not only to supply the labour force of their children for some period of time but to "sell" their children physically (i.e. for the rest of their life), are likely determined by economic factors.

⁴² Even if children are paid by piece, their remuneration is usually lower than that of adults.

⁴³ Indeed, sometimes when mothers find a job children (usually girls) are taken out of school to work in the household. In a sense "*the opportunity cost of girl's schooling is not their foregone wages, but those of their mothers.*"; Grootaert, C. / Kanbur, R. (1995), p. 14.

⁴⁴ See Hemmer, H.-R. / Bohnet, F. (1994), p. 7; Grootaert, C. / Kanbur, R. (1995), pp. 18/19.

⁴⁵ See Mendelievich (1979).

interruption (e.g. failed harvest or job loss) can be reduced if the family income is derived from several independent sources (portfolio approach).⁴⁶ And finally, wage employment of children can result from a lack of complementary resources concerning productive activities within the family economy. This implies a relatively low opportunity cost of wage employment. Since wage labour might be the only economic activity children can perform they are likely to accept relatively low wages.⁴⁷

Self-determined employment of children in market activities can occur in the form of either dependent work (e.g. wage labour, including apprenticeship) or independent market activities (e.g. self-employment). However, children living in their family most probably will not become independent entrepreneurs. Usually they are not free to make such a decision without their parents' permission. There are two main differences between single-person and multi-person households: First, there is the lack of intra-household insurance in the latter, which is a natural outcome in the former when household earnings arise from different sources.⁴⁸ Second, there is by definition no division of labour within one-person economic unit. Hence productivity in the self-production of basic commodities (e.g. nutrition, housing) using purchased inputs and time is likely to be relatively low. Unless the role of the family is substituted by some other social unit (e.g. neighbourhood), children who live on their own have to purchase more commodities directly in the market as compared to multi-person households. Therefore they have to supply additional labour to earn the extra money needed.

(3) *Child Labour Demand*: Employers may prefer child labour for several reasons. From an economic point of view, the question is whether or not there are technological constraints (limitational production function) that prevent to substitute adult labour for child labour. In some production processes the labour force of children might be indispensable for technical reasons.⁴⁹ Increasing production thus would require increasing employment of both children and adults. Empirically, such a fundamental distinction between children and adults in labour demand

⁴⁶ A similar argument is customary in explaining migration patterns; see e.g. Stark, O. (1991).

⁴⁷ The employment of children is sometimes integrated in an apprenticeship scheme. In view of poverty, training on the job seems to be a viable alternative to (costly) schooling. It is perhaps the only way parents can support the formation of their children's human capital. The motive to seek for apprenticeship arrangements can be interpreted as demand for education rather than labour supply, at least to some degree; see Bonnet, M. (1993) and Mendelievich, E. (1979) on this issue.

⁴⁸ A possible reaction to this kind of risk would be to combine several income sources.

⁴⁹ This line of reasoning, which may be called the "nimble finger argument", is often found in the context of miniaturisation of production processes and assembly line production. Concerning carpet production, evidence from India indicates that children and adults both are engaged in the production of carpets of every difficulty. Moreover, the proportion of adults in the production of the finest handknotted carpets is reported to be even higher than that of children. The main reason why child labour is preferred seems to be its low cost. See Levison, D. et al. (1995).

resulting primarily from technological reasons seems hardly to be relevant. At least in the *long run* induced technical change may lead to a substitution of capital for child labour (variation of the production process).

If wages for children and adults are determined primarily by productivity, there would be no segmentation of the labour market. In the case of effective minimum wages (as for example determined by the subsistence level of an adult or by legal constraints) employers probably prefer adults because their productivity is generally higher than that of children. This causes lower costs per unit of output in the case of adult workers as compared to children. If production is fundamentally determined by exogenous forces (e.g. the weather in the case of agricultural production) or if demand is highly variable (i.e. markets are unstable) employers can sometimes not justify employing adult labourers permanently.⁵⁰

In all these cases children may meet the expectations of employers: They have no protection against unlawful dismissal and are likely to accept part-time work or short-term contracts. Children may undercut their adult competitors in terms of wages because they (or the parents who decide to supply the labour of their children) usually accept lower wages than adults can afford. Beside low wages, children are preferred by employers because they are usually highly obedient and rarely organise themselves in order to express and enforce their interests. In addition, children generally learn faster and are more flexible than adults. Thus, child labourers can be assigned more easily to changing occupations. All these features contribute to a significant demand for child labour, especially in the informal sector of the economy.

4. Child Labour and Poverty

(1) The income elasticity of education and leisure is certainly positive. Education and leisure are normal goods, i.e. the demand for education and leisure increases along with the income level. Consequently, other things equal the extent of child labour decreases as the level of income increases. Therefore, absolute poverty is one major determinant of child labour.

⁵⁰ See Bequele, A. / Boyden, J. (1988), p. 2.

(2) Absolute poverty is defined as a situation in which the resources available are not sufficient to satisfy the basic needs. For an explanation of child labour it is necessary to consider the determinants of absolute poverty:⁵¹

(a) *A low endowment of resource ownerships.* Primarily two resource complexes are of major importance:

- The endowment with arable land is most important in rural areas. The dominant role of agriculture in rural areas means that a lack of arable land is the key factor for the emergence of rural poverty.
- The level of human capital is typically very low. The poor members of society possess only their unskilled labour, which is often adversely affected by hunger, malnutrition and disease. Moreover, education and training, which can enhance the endowment with human capital, are at very low level as well.

(b) *Insufficiently productive use of resources.* Income from productive resources can be earned only if these are indeed productively employed. Two limiting factors are particularly important:

- The property rights concerning these resources possibly can or must not be exercised. Legal bans by the government can cause poverty as well as obstacles resulting from groups or individuals exercising power over the poor.
- Exercising property rights can be thwarted by a general lack of complementary resources because these are not available or cannot be obtained on acceptable terms.

(c) *Inadequate earnings even though resources are productively employed.* If the productively useful resources are actually employed, the income that can be derived depends on their net compensation which is influenced by two factors:

- The gross earnings which depend (i) on the physical productivity of the employed resources and (ii) on the market price of the selling goods.
- The remuneration of the complementary resources as well as forced payments to the governments (i.e. taxes) and to private groups (i.e. protection payments) have to be subtracted in order to calculate income net of costs.

⁵¹ See Hemmer, H.-R. (1994), p. 62.

The income net of costs of individuals who solely possess their workforce firstly depends on whether they are employed or unemployed. In the case of employment the income net of costs is determined by a wage contract.

D. Child Labour and Value judgements

(1) The analysis above was positive in nature, i.e. judgements about child labour were completely omitted. A normative statement concerning child labour always implies a value judgement. The value judgements concerning child labour may vary among different cultures.⁵² Besides, the stage of both social and economic development influences the way in which child labour is perceived. Even within a given society, value judgements can vary. In the developed countries, child labour is nowadays mostly considered as evil, but during as well as before the industrial revolution child labour used to be widely accepted.⁵³

(2) No one would assert earnestly "*child labour is always and everywhere a good thing*". But what about the opposite extreme: "*child labour is always and everywhere an evil*"? It is necessary to differentiate because of the phenomenon's complexity. First of all, it is not at issue that those forms of child labour violating "basic human rights" such as bonded labour, child-slavery and prostitution are to be condemned. But what about those forms of child labour not violating "basic human rights"? Because of the various possible forms of child labour a general judgement seems to be difficult. Generally, the employment of children at home, in unpaid or small-scale occupations and the possibility to combine work and school seem to be more tolerable than any kind of paid work for others (e.g. employers or clients) outside the family, large-scale production and work instead of school.⁵⁴

(3) Many authors label child labour as exploitive without defining the expression "exploitation". In an economic context, exploitation is defined as a situation in which a worker is paid less than his marginal product.⁵⁵ This can certainly happen if the employer has some market power and

⁵² This might explain why child labour in some countries (especially in Africa) is not judged as "bad" by natives, while it seems to be harmful from the viewpoint of foreign observers.

⁵³ See Nardinelli for a detailed analysis of child labour during the industrial revolution; Nardinelli, C. (1990).

⁵⁴ See White, B. (1994), p. 873.

⁵⁵ This is the neoclassical definition of exploitation, which is widely accepted in economics. The Marxian definition is not used here because the Marxian theory is based on the labour theory of value, which is widely regarded as invalid.

thus the remuneration can be labelled "unfair".⁵⁶ In this case it seems to be justified to intervene, for example, by improving the employee's degree of organisation to create countervailing power. Within a family, exploitation of children implies that the parents behave in an egoistic rather than an altruistic way. In the former case child labour should be disapproved of. But it seems implausible to assume that all parents behave egoistically when child labour occurs.

(4) Probably the most important aspect deals with the relevant alternative for children who are effectively kept off from an occupation. Is it really more leisure and education enjoyed by the children, or is it just another form of economic activity, probably performed under more harmful conditions? The latter case will occur in the situation of poverty because then the family income is too low to satisfy the basic needs. Thus, in some cases children can be worse off after they were successfully kept away from economic activities. Nardinelli expresses this issue very clearly: *"The economic approach is to consider alternatives. The economist rarely deals in absolutes; thus, the question is not whether something is good or bad but whether it is better or worse than the alternative."*⁵⁷ The answer to the question above is crucial if one really is interested in improving the situation of the children.⁵⁸

(5) According to the considerations above, it seems to be difficult to disapprove of all forms of child labour in general. Whether or not child labour should be tolerated as the lesser evil or whether it should be eliminated immediately depends primarily on the viable alternatives.

III. IMPACT OF RECENT TRENDS IN THE GLOBAL ECONOMY ON CHILD LABOUR

A. Impact of Globalisation

(1) *International trade*: The intensification of international trade increases the demand for labour in LDCs.⁵⁹ If the economy is near full employment there will be a strong increase in the wage

⁵⁶ The case where the employer is able to force the child to work against its own will is also a form of exploitation, which is covered by the claim to meet the "basic human rights".

⁵⁷ Nardinelli, C. (1990), p. 7.

⁵⁸ Otherwise the motivation for combating child labour can be anything else but the improvement of the children's situation, like a protectionist trade policy, for example.

⁵⁹ This argument is based on the Heckscher-Ohlin theory of international trade and the assumption that the LDC's labour to capital endowment exceeds the DC's labour to capital endowment.

rate mainly of adults working in the formal sector. Labour supply shifts from the informal to the formal sector. As far as adult and child labour are substitutes, the wage rate of both adult and child labour increases. According to the income effect child labour is expected to decrease while according to the substitution effect child labour will increase. If, on the other hand, significant unemployment prevails in the initial situation, the rise in the wage rate and the substitution effect is only small. Irrespective of the employment situation, in the long run the income effect is expected to dominate the substitution effect. Consequently, the intensification of international trade possibly increases child labour in the short run but is expected to decrease child labour in the long run.

(2) *International capital mobility*: International capital movements comprise portfolio and direct foreign investments. Generally, capital inflows into LDCs enhance the chance for economic development and therefore contribute to a reduction of child labour in the *long run*. Direct foreign investments are carried out by multinational corporations (MNCs). They employ a significant fraction of workers and usually pay relatively high wages, i.e. the income level increases and child labour decreases. However, while foreign direct investments are almost exclusively limited to the formal sector, MNCs might be connected to enterprises in the informal sector via subcontracting. Hence, it might be possible that the economic activities of MNCs entail child labour in the informal sector.

(3) *International Migration*: International labour mobility from low- to high-income countries relieves the labour market in the countries of origin. Depending on the employment situation the unemployment rate decreases and/or the wage rate increases. The income effect decreases whereas the substitution effect increases child labour. International labour mobility can, on the other hand, represent a risk diversifying strategy. Family members pool their individual income to cover the risk of income losses. For poor households child labour is part of an income insurance strategy. Thus international migration possibly reduces the extent of child labour. However, since international migration involves considerable costs, this might not offer a viable alternative for the very poor.

B. Impact of Regionalisation

(1) In recent years most countries, both developed and developing, have followed an outward-oriented trade strategy. However, rather than liberalising trade unilaterally or bilaterally (with their main trading partners), many of them acceded to regional arrangements.

(2) Regional integration generally causes changes in trade and investment flows. Most of these changes are thought to be beneficial for the countries joining the arrangement. As a consequence of regional integration, incomes in member countries will rise, which makes it less necessary for families to rely on their children's work force. It follows that regional integration is likely to be conducive to a reduction of child labour in participating countries. However, the opposite can be true for non-member countries which may be considerably affected by the formation of regional trading blocks (as for example the Caribbean economies in the case of NAFTA).

(3) Child labour will only become less important in the *long run* if poverty is reduced (i.e. when growth cum trickle-down applies). The most promising measure to induce growth in the *long run* is to allow for external liberalisation. Not only will this enable LDCs to get access to foreign goods markets, but also to capital and know-how. From this point of view, LDCs are likely to gain most if they realise integration with more developed countries ("*North-South-Integration*") rather than with other LDCs. However, in the *long run* the positive effects would be highest and *all* countries might profit if global rather than regional integration would be realised.

IV. EVALUATION OF SELECTED INTERVENTIONS TARGETING CHILD LABOUR

The rise in global trade that occurred in recent years has strengthened the trend that consumers buy more and more products that are produced in foreign countries and under social conditions that are fundamentally different from the standards customary in their home countries. The focus of attention on the elimination of child labour is therefore at an international level and both, *penalties* and *incentives*, are discussed controversially. Three major issues can be distinguished:

(i) labelling child-labour-free products, (ii) trade preferences given to countries that meet certain labour standards and (iii) import prohibitions concerning products made by using child labour.⁶⁰

A. Labelling Campaigns

(1) The introduction of labels indicating the standards under which products are produced can be seen as a means that enables consumers to choose those products that correspond with their preferences. Not only are labels indicating child-labour-free products (such as for example RUGMARK⁶¹ or CARE&FAIR⁶²) fully compatible to a market economy, they are indeed conducive to it if they effectively increase market transparency for consumers.

(2) There are, however, some qualifications to be considered:

- Labels are standardised products that aim at distinguishing "good" and "bad". Reality, however, is manifold and since globally valid labour standards for the employment of children do not exist, a sweeping classification cannot do justice to such a complex phenomenon.
- The economic (as well as the social) causes of child labour are not addressed at all.⁶³
- Although generally most children work in the domestic sector, child labour in this sector is not dealt with.
- Companies not being covered by the labelling scheme may be negatively affected even if they currently do not employ any children and probably never employed children before.⁶⁴

⁶⁰ Obviously, not only do quality and price of the products matter to consumers, some are also interested in the conditions under which these products are produced. In addition to this interest in social conditions, the interest in ecological consequences of production has increased recently. This trend led to a new approach called "*Sustainable Development*", that aims at combining economic and ecological issues. Eco Labelling and Social Labelling can be regarded as complements concerning a "full" indication of the conditions of production.

⁶¹ The RUGMARK FOUNDATION, established by "*Brot für die Welt*", "*Misereor*" and "*terre des hommes*" (since October 1995 the German section of UNICEF has joined the sponsoring team), aims at eliminating the employment of children in Indian carpet production by assigning the RUGMARK to carpets made without child labour. The approach includes setting up a fund financed by contributions of the exporting companies. This fund is intended to support schools and training institutions in those regions where many children were employed prior to the campaign.

⁶² CARE&FAIR is an association established by the German federation of carpet importers. The label does not promise child-labour-free products and therefore controls are not necessary. It rather supports rehabilitation and education programmes for children, financed by the imposition of an export charge levied on all carpet imports of member companies to Germany from India, Nepal, and Pakistan.

⁶³ This implies that consumers in developed countries may be content with labelling while child labour in LDCs continues to exist (perhaps through subcontracting or in other sectors where the working conditions are probably even worse).

- Controls, necessary to ensure the credibility of such campaigns, are very costly to administer. Insofar there is a trade-off between monitoring costs and low efficacy due to abuse.⁶⁵

(3) After all, labelling of child-labour-free products can be judged as an effective means concerning the elimination of child labourers from the export sector, at least from formal employment.⁶⁶ Production in exporting industries relying on child labour will decrease, as will child labour demand and children's wages. After being displaced from the export sector these children may, however, find themselves worse off if no viable alternative exists (e.g. education, better working conditions in other sectors). This illustrates that with labelling campaigns the symptoms rather than the causes of the phenomenon of child labour are addressed. Only the elimination of the latter (especially rising incomes of poor families) will in fact lead to an end of child labour as a relevant economic factor. Therefore, labelling campaigns can contribute effectively to the goal of reducing child labour only if they are part of a more general approach that creates alternatives for children in the first place. Labelling *per se* does not suffice.⁶⁷

B. Trade Preferences

(1) The United States' Generalised System of Preferences (GSP) is the most important example of a preferential treatment of child-labour-free products in international trade.⁶⁸ It aims at substituting "trade" for "aid".⁶⁹ In short, it provides special trade benefits to LDCs that meet "*internationally recognised worker rights*", including a minimum age for the employment of children.⁷⁰

(2) Although child labour is addressed explicitly within the scope of the US GSP, there are some important critical points:

⁶⁴ See Grimsrud, B. / Melchior, A. (1996), p. 9.

⁶⁵ Monitoring costs are part of the more general notion of transaction costs discussed above all within the scope of "*Neo-institutional Economics*". If monitoring is costly, there is likely to exist some efficient degree of monitoring which, however, entails a certain degree of abuse.

⁶⁶ Child labourers may indeed be urged by their former employers to continue working for them on an informal basis or through subcontracting schemes.

⁶⁷ In fact, RUGMARK as well as CARE&FAIR include measures that aim at providing such alternatives.

⁶⁸ The EU has also GSP provisions concerning child labour which, however, will not become effective before 1998.

⁶⁹ See Harvey, P. (1996), p. 1.

⁷⁰ According to the programme these rights include (i) the right of association, (ii) the right to organise and to bargain collectively, (iii) a prohibition of the use of any form of forced or compulsory labour, (iv) a minimum age for the

- A petition calling for the review of the status of a country is left to the discretion of a GSP subcommittee.
- A minimum age for admission to employment is not the only criterion, and probably not the most important one.
- The provision is vague since no particular age for the employment of children is specified.
- It is open to broad interpretations since 'taking steps' to meet the standards can be sufficient.
- The President himself, taking into account the recommendations of the subcommittee, makes the final decision whether to grant or to deny GSP preference to a particular country.⁷¹

(3) After all, trade preferences may be effective concerning the dissemination of certain labour standards (at least to the satisfaction of domestic interest groups). However, they are not qualified to solve the problem of child labour because

- they do not target child labour specifically,⁷²
- they do not address the economic causes of child labour and
- they do not take into consideration the social consequences the programme has for children (since no alternatives are offered).

Therefore, trade preferences referring to general labour standards such as GSP are not adequate if the living and working conditions of children are concerned.⁷³

C. Import Prohibition

(1) The import of products made by using child labour can either be prohibited unilaterally or as a result of international negotiations about labour standards.

(2) The most important unilateral attempt to prohibit the import of products made by children was the US "*Child Labor Deterrence Act*" of 1993.⁷⁴ Although the bill has not become law until

employment of children, and (v) acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health.

⁷¹ See Kelleher, J. (1994), pp. 165/166.

⁷² Specific targeting is necessary, although not sufficient, for policy design.

⁷³ For further informations see Sapir, A. (1996).

now it has had a profound impact on child labour.⁷⁵ The threat of an US import ban was sufficient to cause the dismissal of more than 40,000 child workers in the Bangladesh garment industry, which depends heavily on the US market.⁷⁶ Since an import ban alone, however, does not eliminate (or even influence) the factors forcing children to work, the extent of child labour is probably hardly affected. The children dismissed from employment in garment production possibly have to accept lower wages in other sectors or are forced to do more hazardous work to support themselves.

Not only does a unilaterally imposed import ban generally not contribute to the "solution" to the problem of child labour, but also it is in contradiction to the widely accepted provisions of the General Agreement on Tariffs and Trade (GATT).⁷⁷ Unilateral measures are often undertaken under the pressure of national interest groups pretending to defend the interests of "exploited" children in LDCs while in fact seeking to protect their own wealth. In order not to be exposed to the reproach of protectionism, the issue of international labour standards should be left to multilateral negotiations.

(3) International negotiations concerning the implementation of a social clause in trade agreements seek to define criteria for basic labour rights. Unless these rights were satisfied, production would not be allowed and trade could be restricted. It is generally agreed that these rights include *"freedom from slavery and indentured servitude, the fullest possible information on safety and health risks in the workplace, avoidance of undue child labour when families' financial circumstances permit, and freedom of association and the right to bargain collectively."*⁷⁸

Such basic rights do, however, not justify a general prohibition of child labour since the judgement on child labour depends heavily on social attitudes and on a country's stage of development. With respect to child labour each country is directly responsible. However, if governments do not protect children from conditions fundamentally detrimental to the children's physical and social development (i.e. when *"political failure"* prevails), there is likely to exist a

⁷⁴ The bill is also known as the *"Harkin Bill"* (sponsored by Senator Harkin, Iowa).

⁷⁵ Another bill, however, that is often not recognised, is the US Foreign Aid Bill of 1993 that limits assistance of the US Agency for International Development (USAID) to enterprises not using child labour; see Bhattacharya, D. (1996), p. 7.

⁷⁶ See Bhattacharya, D. (1996), p. 17.

⁷⁷ See Kelleher, J. (1994), pp. 172-180.

⁷⁸ Fields, G. (1995), pp. 21/22.

certain justification for external intervention.⁷⁹ But even in this case, *trade policy* is most likely not the preferable instrument.

V. POLICY RECOMMENDATIONS

(1) Global and regional integration, above all the intensification of international trade, might cause an increase in child labour in some sectors of LDCs in the short run. However, restricting international trade seems to be an inadequate policy for reducing child labour for two main reasons:

- Only a very small fraction of the economically active children (the estimates range around 5 percent) are employed in the export sector.
- Since child labour is strongly related to poverty, trade restrictions would harm the less developed countries most.

(2) On the contrary, trade liberalisation and free access to the markets of the industrialised countries is indicated in order to give the less developed countries the chance to take part in the international division of labour and specialisation according to their comparative advantages. Since there is much evidence that international trade stimulates economic growth, an outward-oriented policy strategy will improve the prospects for economic growth. Child labour can be viewed as a domestic distortion, which can result from absolute poverty, distorted intertemporal preferences, a weak negotiation position of the mother-child nexus within the family, imperfect capital markets etc. Consequently, the adequate policies for reducing child labour are domestic policies (e.g. poverty alleviation) rather than international trade policies. Therefore, international trade should not be restricted so that the economy can take part in the international division of labour and benefit from the positive welfare effects.

(3) A general legal prohibition of child labour does not seem useful because the corresponding laws are often not effectively enforceable.⁸⁰ Moreover, children might be worse off after being

⁷⁹ See Kelleher, J. (1994), p. 188.

⁸⁰ There is a large number of historical examples of governments trying to prohibit economic activities without success. Experience shows that those activities are carried out as long as it is economically useful from the individual point of view. The main effect of legal prohibition probably is the shift of child labour activities into sectors which are not controllable. In this case the working conditions are likely to deteriorate. This does not mean that government interventions are to be generally refused. If, for example, market power causes exploitation, government interventions might be useful.

successfully displaced from occupation.⁸¹ Therefore, in order to improve the situation of the children it is necessary to reduce the necessity and incentives for children to work. This requires policies that reduce absolute poverty as well as the shadow price of alternative time uses other than economic activities - mainly education.

(4) The demand for education depends on its shadow price.⁸² The lower the shadow price the higher is the demand for education and the lower is the extent of child labour. For keeping the shadow price of education low the following points are important:

- Access to primary schools should be free.
- If the educational institutions are spatially separated from the place of residence, the use of transport services for pupils should be free (e.g. in rural areas).
- The teaching subjects should be adequate, i.e. education should realise the maximum of skill and competence of the child by taking into consideration the environment in which he or she lives.
- Those technologies of production should be promoted which keep the labour productivity of children relative to the labour productivity of adults low.⁸³
- Supplementary nutrition in conjunction with education should be offered free of charge. This further reduces the shadow price of education and increases the incentive to "consume" educational services.

(5) Moreover, a well-educated generation of children most probably has a positive impact on the situation of the next generation for two reasons:

- The potential income increases with the level of education and, hence, the necessity for an economic contribution of the subsequent generation of children decreases.
- The educational level of the parents influences their decisions whether children should be economically active or enjoy education. Relatively well-educated parents can better assess the benefits of education for the children's future welfare.

⁸¹ Of course those child labour forms violating "basic human rights" ought to be prohibited by law.

⁸² The concept of shadow price was defined and the determinants of the shadow price for education were analysed in chapter II.C.2.

⁸³ This keeps the opportunity costs of the children's time low. The mechanisation of the agricultural industry, for example, lowers the productivity of children relative to other factors of production (adult labour and capital).

Compulsory education might be helpful if the preferences of the parents seem to be egoistic rather than altruistic or if preferences are distorted, i.e. the parents misjudge the future benefits of education.

(6) There is a strong relationship between absolute poverty and child labour. Therefore, a successful strategy of poverty alleviation is qualified to reduce the extent of child labour. Poverty alleviation should refer to the determinants of absolute poverty:⁸⁴

- *A low endowment of resource ownerships.* Primarily two resource complexes are of major importance: Arable land (most important in rural areas) and human capital. Therefore, areas of action for a poverty-oriented development policy are (i) improving access to arable land by means of a land reform which brings about a more equal distribution of land property⁸⁵ and (ii) increasing endowment with human capital by improving health, nutrition, education and training (including apprenticeship).⁸⁶
- *Insufficiently productive use of resources.* Income from productive resources can be earned only if these are indeed productively employed. This can be prevented by the lacking opportunity to enforce property rights (e.g. legal or informal bans) or the lack of complementary resources, including physical infrastructure and capital. Therefore, areas of action for a poverty-oriented development policy are (i) the creation of the required legal and administrative safeguards for the poor and (ii) improving the access to infrastructure, to the capital market and to adequate technologies.⁸⁷
- *Inadequate earnings even though resources are productively employed:* The income which can be derived from the productive employment of resources depends on their net compensation. This is determined by the physical productivity of the resources, by the gross earnings from selling the goods and services produced and by the remuneration of the complementary resources. A poverty-oriented development policy, therefore, ought to eliminate power asymmetries on sales and input markets in order to grant the poor fair market opportunities. On an international level this includes the removal of trade restrictions in the

⁸⁴ See Hemmer, H.-R. (1994), p. 62.

⁸⁵ However, since the land size is partially complementary to child labour, a larger farm size might increase the children's productivity in agricultural work; see Levy, V. (1985).

⁸⁶ It should be stressed here that the main obstacle blocking access to health and educational services is the lack of physical infrastructure - above all in rural areas.

⁸⁷ The development of capital markets and policies in order to enable the access to capital markets to the poor can reduce child labour as far as child labour is due to capital market imperfections.

industrialised countries, which impede the access to markets for agricultural and labour-intensive products from LDCs.

(7) Besides, poverty can result from an insufficient access of the poor to public goods which are relevant for satisfying the basic needs. This usually results from a widespread exclusion of the poor from political decisions. Hence, the government should on its own improve the access to those public goods for the poor. Finally, poverty can result from insufficient transfer payments in order to compensate the lack of market income. Therefore, public transfer schemes are needed for reducing absolute poverty.

VI. CONCLUSIONS

(1) A great proportion of the world's children is forced to work in order to earn their living. Although child labour is predominant in the poorest countries, it also exists in the most developed nations. The factors bringing households to rely on their children's work force are manifold. The most important single reason for the existence of child labour is poverty. Although poverty alleviation programmes are in most cases not specifically designed to combat child labour they seem to be qualified to contribute to this goal in an indirect way. While there is broad consensus on the need to alleviate poverty, the elimination of all forms of child labour is discussed more controversially.

(2) Child labour has many faces and *some* economic activities of children are indeed beneficial to the children's social development. And not to forget: "*...the idea that 'children should not work' certainly does not come from the world's children.*"⁸⁸ On the other hand, many children in the world are "exploited" - not only by their employees but also by their own parents. Hence, legal measures to combat such forms of child labour should refer to violations against *basic human rights*, rather than to child labour in general. Without a doubt, these laws need to be enforced strictly.

(3) However, the inclination of foreign observers to condemn child labour or other production practices in LDCs in general is not always the result of moral indignation; in some cases it must be judged as form of disguised protectionism. Calls for external intervention should therefore be regarded very sceptically. After all, the connection between international trade and labour

⁸⁸ White, B. (1994), p. 875.

standards in general and clauses on child labour in particular is a very delicate matter. In this issue the following words of Fields (1995) hit the nail squarely on the head:

*"If we in the First World really and truly believe that all workers in the Third World should enjoy the same labour standards as workers in our countries do, and if we are in fact prepared to offer others the same opportunities as our people have, let us open our borders and let people everywhere seek the best available labour standards wherever in the world they may be found. Otherwise, let us exercise a bit more restraint in telling others what we think they should do."*⁸⁹

⁸⁹ Fields, G. (1995), p. 22.

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