

*Development Policy Network for the Elimination of Child Labour (DPNet)*  
*International Programme on the Elimination of Child Labour (IPEC)*  
*International Labour Office (ILO)*

## **The Economics of Child Labour: An Annotated Bibliography**

**November 2003**

- **Admassie, Assefa. 2000. *The Incidence of Child Labour in Africa with Empirical Evidence from Rural Ethiopia*. ZEF – Discussion Paper on Development Policy No. 32. October. Bonn: Zentrum für Entwicklungsforschung (Center for Development Research), Universität Bonn.**

► **Abstract:** There has been a growing interest in the subject of child labour in Africa in recent years among academics, professionals and the media primarily for two reasons: Firstly, because the number of children affected is growing, and secondly because of the negative repercussions that work at an early age may have on the personal development of children and the economic and social development of countries concerned. The main intent of this paper was to examine the incidence of child labour in Africa with the help of empirical data from rural Ethiopia, since it is one of the countries with a high incidence of child labour in Africa. The analysis showed that the incidence of child labour is indeed very high in Africa, where children's participation rate in economic activities could be as high as forty percent. If present trends continue, Africa could be faced with more than 100 million child labourers in the year 2015. The empirical data from Ethiopia, although it may not be representative of the whole continent, showed that children as young as five years old are made to participate in farm and household work activities, some of which could be totally incompatible with schooling. Child labour has also been one of the main reasons for low school enrolment in rural Ethiopia. In order to mitigate the problem of child labour in Africa, there is a need to adopt serious poverty reduction strategies, compulsory but flexible primary education and training policies, appropriate community awareness programs, and enforceable legal measures. In addition, more research on the push and pull or demand and supply factors on child labour are needed if progress is to be made on the efforts to curtail child labour in Africa.

► <http://www.zef.de/download/>

- **Admassie, Assefa. 2002. *Allocation of Children's Time Endowment between Schooling and Work in Rural Ethiopia*. ZEF – Discussion Paper on Development Policy No. 44. February. Bonn: Zentrum für Entwicklungsforschung (Center for Development Research), Universität Bonn.**

► **Abstract:** Children have always been part of the economic life of societies. Historical evidence indicates that the contribution of children to family income in cash or in kind has been consistently significant. Currently, the issue of child labor has become an important global development issue in academic research. Empirical evidence indicates that child laborers are found mostly in developing countries and are employed mainly in agriculture and related activities. The aim of this study was to examine the decision-making behavior of subsistence rural households with respect to allocating their children's unit-time endowment among competing activities, including work and school attendance. A multinomial logit model has been used to identify the social, economic and cultural factors influencing household's decision about the allocation of children's time using data from a survey of rural households in Ethiopia. The results show that there are a number of child- and household-specific attributes, culture- and location-specific factors as well as economic factors related to household wealth and technological development that affect the decision-making process. Improving the educational infrastructure, encouraging technological adoption and creating a more stable economic base for rural households could significantly contribute towards reducing the problem of child labor.

► <http://www.zef.de/download/>

- **Ahmed, Iftikhar. 1999. "Getting rid of child labour", in *Economic and Political Weekly*, 34.27, 3 July, pp. 1815-22.**

► **Abstract:** This paper, based on a quantitative empirical cross-country study, provides policy insights to the tackling of the root causes of child labour. The econometric model applied explains for a substantial proportion of the cross-country variations in child labour. The elasticities estimated would enable us to forecast the percentage change in the employment of child labour resulting from a given percentage change in any one of the explanatory variables consisting of the level of development (GNP per capita), poverty, income inequality, school enrolment, parental education, dominance of agriculture and age structure of the population. The range of policy options for combating child labour is indeed large and the weights to be attached to the individual elements of the socio-economic policy package are clearly guided by the explanatory power of each of the above causal factors.

► <http://www.ilo.org/public/english/standards/ipe/index.htm>

- **Akabayashi, Hideo; George Psacharopoulos. 1999. "The trade-off between child labour and human capital formation: A Tanzanian case study", in *Journal of Development Studies*, 35.5, June, pp. 120-40.**

► **Abstract:** We investigate the degree to which there is a trade-off between child labour and human capital formation using time-log data of children from a Tanzanian household survey. We find that a trade-off between hours of work and study exists, and hours of work tend to be more affected by social conditions than hours of study. Hours of work are negatively correlated to reading and mathematical skills through the reduction of human capital investment activities, indicating a trade-off between child labour and human capital. The results point up the complexity of the issue and the need for detailed time allocation data.

- **Andvig, Jens Christopher. 2001. "Family-controlled child labor in Sub-Saharan Africa: A survey of research". *Social Protection Discussion Paper No. 0122*. October. Washington, DC: World Bank.**

► **Abstract:** This is a review of research on child labor in Sub-Saharan Africa. It focuses on child labor taking place in the household and controlled by relatives of the children since this is the most extensive form of child labor in African countries. It is also the form of child labor that is the most difficult one to appraise from a normative point of view. Subtle trade-offs between schooling, leisure and poverty across generations may be involved. Hence, the paper emphasises welfare economics issues pertaining of child labor. Another feature of this study is that it seeks to survey not only the economic research, but also research from other social sciences, particularly social anthropology. The social anthropological studies deal with an aspect of child labor so far less adequately dealt with by economists - the relationship between their labor and their socialization; how certain types of labor and education may give rise to different preferences to the children as adults. A major, but tentative conclusion of this survey is that the relationship between poverty and child labor is less close than normally assumed in the policy debate.

► <http://www.worldbank.org/>

- **Anker, Richard. 2000. "Conceptual and research frameworks for the economics of child labour and its elimination". *IPEC Working Paper*. Geneva: ILO.**

► This paper contends that child labour policies, programmes, and research have been much too simplistic, and a lack of attention to the economics of child labour as well as to the complexity of child labour has retarded the identification of appropriate and effective policies for the elimination of unacceptable forms of child labour. It addresses the following questions:

- What is child labour and why the concern?
- If child labour were eliminated, who would benefit economically and who would lose?
- How would economic benefits and losses accompanying the elimination of child labour vary over time and across actors and institutions?

- What are the policy implications of an economic analysis of the elimination of child labour?
- What types of research are needed on the economics of child labour?

One purpose of this paper is to develop conceptual and research frameworks for understanding the economics of child labour by taking into consideration that the economic benefits and costs from the elimination of child labour are influenced by the fact that there are: (i) various forms of child labour; (ii) several possible justifications for eliminating child labour; and (iii) a range of institutions and actors affected. In this way, it is hoped to improve our understanding of the economic determinants and consequences of child labour and so better enable policy-makers to devise effective policies to eliminate hazardous and other worst forms of child labour as well as improve lives, especially those of children and poor families. Throughout this paper, policy implications are drawn and research suggestions are made.

► <http://www.ilo.org/public/english/standards/ipec/index.htm>

- **Anker, Richard. 2000. "The economics of child labour: A framework for measurement", in *International Labour Review*, 139.3, pp. 257-80.**

► **Abstract:** How much is reliably known about the complexities of child labour? This article provides a conceptual framework within which to measure the economic aspects of the phenomenon. Contending that so far policy approaches have been too simplistic, the author outlines the reasons for concern about child labour, before explaining how the various forms should be defined and measured, and indicating pitfalls to avoid. Exploring these complexities raises questions such as school quality, whether child labourers take adults' jobs, and positive aspects of certain non-hazardous forms of child labour. Finally, he draws out policy and programme implications.

- **Anker, Richard; B. Melkas. 1996. "Economic incentives for children and families to eliminate or reduce child labour". Geneva: ILO.**

► **Abstract:** The purpose of this report is to present the results of a survey of national and international NGOs and other organizations on the use of income replacement and substitution activities as a strategy in the battle against child labour. The survey was conducted in April-July 1995 and its primary objective has been to produce an overview of NGO experiences with income replacement and substitution activities being implemented around the world; and to provide practical information for those who plan, implement or evaluate projects or programmes with an income replacement or substitution component. It needs to be emphasized that the survey was exploratory, and was not based on a representative sample.

The report is divided into two parts. Part I provides a brief introduction to the child labour problem with discussions on definitions of child labour, reasons for child labour, the effects of child labour on labour markets, the importance of community participation and education, and the possible problem of child labour transferring from one occupation or workplace to another. Part II describes the survey; how it was done, what were its limitations, who responded, and what were our conclusions. This includes detailed discussions on different types of income replacement and substitution activities, as well as on practical aspects of these kinds of projects, such as targeting and the best form for grants and payments. The last section is reserved for concluding comments.

► <http://www.ilo.org/public/english/standards/ipec/index.htm>

- **Anker, Richard; Sandhya Barge; S. Rajagopal; M.P. Joseph (eds.). 1998. *Economics of Child Labour in Hazardous Industries of India*. Baroda, India: Centre for Operations Research and Training.**

► This book brings together papers based on field research and quantitative surveys that were presented at a national workshop in India to examine the economic implications of replacing child labour with adult labour in certain selected industries. The workshop, which took place in 1995 in New Delhi, was organized jointly by the ILO's International Programme on the Elimination of Child Labour (IPEC) and the Centre for Operations Research and Training (CORT), Vadodara.

Among other results, the research undertaken found that children do not provide irreplaceable skills; that, contrary to the notion that children provide higher skills at least in some industries like carpet making, usually children provide lower skills than adults in all the industries studied; that production involving child labour is generally carried out in the unorganized sector and in small units; that most employers in the unorganized sector have low earnings, which induces them to hire children who can be paid less than adults. The most important finding is that the increase in the cost of production, on account of replacing children with adult labour, is negligible and can be absorbed by the enterprise without difficulty and without impinging on profits.

Chapter headings:

1. Overview and introduction
2. Economics of child labour in India's carpet industry
3. Child labour in glass-bangles industry of Ferozabad – Uttar Pradesh: An economic analysis
4. Economics of replacing child labour in diamond industry of Surat
5. Is child labour really necessary in India's carpet industry?
6. Economics of child labour in the carpet industry
7. Economics of eliminating child labour in gem stone industries
8. Problem of child labour in the lock making industry of Aligarh
9. Child labour in mosaic chip industries and limestone kilns in Kurnool District of Andhara Pradesh

► **Bachman, S.L. 2000. "A new economics of child labour: Searching for answers behind the headlines", in *Journal of International Affairs*, 53.2, Spring, pp. 545-72.**

► **Abstract:** Studies of child labor range across the disciplines of economics, anthropology, sociology, education and medicine. This paper reviews some of this research and the public debate during the last two decades, and concludes with some anti-child labor policy recommendations. The first section examines the history of child labor as a public issue and discusses the definition of child labor. The second section explores the microeconomics of child labor, inside and outside the family, to explain why children go to work. The third section focuses on how national and international economic policies that shape the economic climate can affect child labor trends. The paper concludes with a review of public policy implications. In sum, although globalization has popularised notions of universal norms, values, and solutions, it is misleading and even dangerous to assume that one-size-fits-all policies will solve the problems that lead millions of children into abusive labor.

► **Bachman, S.L. 2000. "The political economy of child labor and its impacts on international business", in *Business Economics*, 35.3, July, pp. 30-41.**

► **Abstract:** Child labor is linked to global business directly and, more commonly, indirectly. Critics blame increased trade and financial flows for increased child labor, and those criticisms have undermined the legitimacy of further trade and financial liberalization. Companies – including multinationals such as Nike, Wal-Mart, IKEA and the Brazilian subsidiaries of U.S. and European automobile manufacturers – have responded with a range of initiatives. Unless business responses alleviate the worst forms of child labor, the legitimacy of continued trade and financial liberalization will continue to be undermined by perceptions that liberalization disproportionately hurts children, especially child workers.

► **Baland, Jean-Marie; James A. Robinson. 2000. "Is child labour inefficient", in *Journal of Political Economy*, 108.4, pp. 663-79.**

► **Abstract:** We build a model of child labor and study its implications for welfare. We assume that there is a trade-off between child labor and the accumulation of human capital. Even if parents are altruistic and child labor is socially inefficient, it may arise in equilibrium because parents fail to fully internalise its negative effects. This occurs when bequests are zero or when capital markets are imperfect. We also study the effects of a simple ban on child labor and derive

conditions under which it may be Pareto improving in general equilibrium. We show that the implications of child labor for fertility are ambiguous.

- **Basu, Kaushik. 1999. "Child labor: Cause, consequence, and cure, with remarks on International Labor Standards", in *Journal of Economic Literature*, 37, September, pp. 1083-119.**

► The aim of this paper is to provide an analytical survey of the field of child labor. The first few sections review the factual background of the problem and the main policy debates and options. Later sections dwell on various types of models and theories related to child labor. Some questions concerning international labor standards in which the problem of child labor arises explicitly are also discussed.

- **Basu, Kaushik. 2000. "The intriguing relation between adult minimum wage and child labour", in *Economic Journal*, 110, March, pp. C50-C61.**

► **Abstract:** Because most parents send their children to work when compelled by poverty, one would expect a rise in adult wage to lower child labour. However, if the rise in wage is achieved by a minimum wage law, its impact can be intriguing. It can, for instance, cause some adults to be unemployed and send their children to work, which in turn displaces more adult labour and sends more children to work. The paper solves this process and predicts the incidence of child labour. It shows that, for appropriate parametric configurations, child labour may fall or rise as the adult minimum wage is raised.

- **Basu, Kaushik; Pham Hoang Van. 1998. "The economics of child labor", in *American Economic Review*, 88.3, June, pp. 412-27.**

► **Abstract:** If child labor as a mass phenomenon occurs not because of parental selfishness but because of the parents' concern for the household's survival, the popular argument for banning child labor loses much of its force. However, this assumption about parental decision-making coupled with the assumption of substitutability in production between child and adult labor could result in multiple equilibria in the labor market, with one equilibrium where children work and another where adult wage is high and children do not work. The paper establishes this result and discusses its policy implications.

- **Basu, Kaushik; Pham Hoang Van. 1999. "The economics of child labor: Reply", in *American Economic Review*, 89.5, December, pp. 1386-8. Reply to Swinnerton and Rogers (1999).**

- **Beegle, Kathleen; Rajeev H. Dehejia; Roberta Gatti. 2003. "Child labor, income shocks and access to credit". Washington, DC: World Bank.**

► **Abstract:** Although a growing theoretical literature points to credit constraints as an important source of inefficiently high child labor, little work has been done to assess its empirical relevance. Using panel data from Tanzania, we find that households respond to transitory income shocks by increasing child labor, but that the extent to which child labor is used as a buffer is lower when households have access to credit. These findings contribute to the empirical literature on the permanent income hypothesis by showing that credit-constrained households actively use child labor to smooth their income. Moreover, they highlight a potentially important determinant of child labor and, as a result, a mechanism that can be used to tackle it.

<http://www.worldbank.org/>

- **Bhalotra, Sonia. 2003. "Child labour in Africa". OECD Social, Employment and Migration Working Papers No. 4. 28 April. Paris: OECD.**

► This paper presents an overview of the child labour problem in Africa, with particular emphasis on Ethiopia and Ghana. The causes and policy implications of the problem are carefully analysed. The author argues that Africa, unlike Asia and Latin America, is disadvantaged in the fight against child labour because of various factors contributing to exacerbate the phenomenon, such as the economic decline, war, famine, and HIV/AIDS. While some cultural practices such as fostering, inherent all over the continent, are partly responsible for the problem, the trade-offs

between education and child labour need also to be considered. The paper introduces an analytical framework to analyse the causes of child labour. The net enrolment rate in primary school in Ethiopia is the lowest in the world, the author points out, while highlighting what is termed the “wealth paradox” existing in countries like Ghana. Indeed, a large majority of the Ghanaian working children appear to come from land-rich households. The paper also acknowledges the impressive list of policies recently put in place in Africa, but questions the relevance of those policies aimed at discouraging child labour, as compared to the ones directly promoting school attendance. Last but not least, the incidence of child labour, the study points out, also reflects the level of governance in a particular country or region. As for Africa, even though some progress might have been achieved, this is not always obvious because of the lack of appropriate monitoring and evaluation mechanisms.

► <http://www.oecd.org/>

- **Bhalotra, Sonia; Christopher Heady. 2001. “Child farm labour: The wealth paradox”. Social Protection Discussion Paper No. 125. September. Washington, DC: World Bank.**

► **Abstract:** This paper is motivated by the observation that children in land-rich households are often more likely to be in work than the children of land-poor households. The vast majority of working children in developing countries are in agricultural work, predominantly on farms operated by their families. Land is the most important store of wealth in agrarian societies and it is typically distributed very unequally. These facts challenge the common presumption that child labour emerges from the poorest households. We suggest that this seeming paradox can be explained by failures of the markets for labour and land. Credit market failure will tend to weaken the force of this paradox. We model these effects and estimate the model on data from rural Pakistan and Ghana. A striking finding of the paper is that, after controlling for household consumption and other covariates, the wealth paradox persists for girls but, for boys in both countries, it vanishes.

► <http://www.worldbank.org/>

- **Bhalotra, Sonia; Zafiris Tzannatos. 2003. “Child labor: What have we learnt?”. Social Protection Discussion Paper No. 0317. September. Washington, DC: World Bank**

► **Abstract:** The purpose of this paper is to review what has been learnt from the growing volume of applied research on child labor and to indicate directions for future research. We start by looking at research by the World Bank, which has played a fairly pioneering role in this area in data collection and, increasingly, in data analysis, more recently in cooperation with other agencies, such as the ILO and UNICEF. With a view to guiding policy interventions in this area, we attempt to identify the patterns, which arise from the study of a wide range of countries. We emphasize that the current state of empirical research makes this task difficult: A striking feature of available research is the sheer variety of results that it has produced. This review discusses the extent to which this diversity is a result of methodological problems, as opposed to genuine country variations. We argue that the neglect of statistical issues such as endogeneity, measurement error and aggregation error has biased the results of a number of studies. At least as important a shortcoming is that empirical research has been conducted without adequate reference to theory. As a result, the estimated equations are sometimes mis-specified and often difficult to interpret. This impedes the confidence with which policy prescriptions can be applied.

► <http://www.worldbank.org/>

- **Blunch, Niels-Hugo; Sudharshan Canagarajah; Sangeeta Goyal. 2002. “Short and long-term impacts of economic policies on child labor and schooling in Ghana”. Social Protection Discussion Paper No. 0212. May. Washington, DC: World Bank**

► **Abstract:** While the issue of child labor in developing countries has received increased attention in recent years, most of the empirical analysis has been based on one-time cross sectional samples. While this may give an idea of the incidence and determinants of child labor at one point in time, it is silent about the dynamics of child labor over time and sometimes may even

be influencing policy choices against child labor adversely. This paper attempts to fill this void, analyzing the dynamics of child labor and schooling in Ghana, aiming at investigating the impact of broad economic reforms on child labor and schooling in the short, medium and long run. Starting from a premise that the simple - direct - relationship between poverty and child labor, which has often been seen as *the* feature of child labor, may not adequately capture the multi faceted nature of child labor, we find evidence of asymmetries in the child labor-poverty link, as well as quite complex dynamics in the evolution of child labor and schooling and their determinants over time. Most notably, child labor is found to be responsive to poverty in the short run, but not in the long run, while child schooling is unaffected by poverty in short run but responds in the medium- to long run. These results suggest that child labor acts as an economic buffer of the household in the short run, regardless of changes in the economic environment or perceptions of the latter following economic reforms, thus supporting - and refining - the poverty explanation of child labor.

► <http://www.worldbank.org/>

- **Blunch, Niels-Hugo; Dorte Verner. 2000. "Revisiting the link between poverty and child labour: The Ghanaian experience". Washington, DC: World Bank.**

► **Abstract:** The link between poverty and child labor has traditionally been regarded a well established fact. Recent research, however, has questioned the validity of this link, claiming that poverty is not a main determinant of child labor. Starting from a premise that child labor is not necessarily harmful, we analyze the determinants of harmful child labor, viewed as child labor that directly conflicts with the human capital accumulation of the child in an attempt to identify the most vulnerable groups, thus possibly enabling appropriate actions to be taken by policy makers. We reinstate the positive relationship between poverty and child labor, a conjecture that has been questioned by recent literature. Further, we find evidence of a gender gap in child labor linked to poverty, since girls as a group as well as across urban, rural and poverty sub-samples consistently are found to be more likely to engage in harmful child labor than boys. The established gender gap need not necessarily imply discrimination but rather reflect cultural norms. A further exploration of this issue seems to be a potentially fruitful avenue for further research. The last main finding is that there exist structural differences in the processes underlying harmful child labor in Ghana across gender, across rural/urban location as well as across poverty quintiles of households.

► <http://www.worldbank.org/>

- **Brown, D.K. 2001. 'Child labour in Latin America: Policy and evidence', in *World Economy*, 24.6, pp. 761-78.**

► **Abstract:** The paper examines programmes that address child labour practices in Latin America. The aggressive attention paid to the plight of child workers over the last decade has produced an array of empirical evidence on the determinants of child labour and policy initiatives designed to improve educational attainment. The empirical evidence points to a number of household characteristics such as income, access to capital markets, family assets, and school quality as primary determinants of child labour. Some of the more imaginative programs have taken the empirical evidence into consideration, attempting to address capital market failure, flexibility in both work and school schedules and school quality and availability.

- **Cigno, Alessandro; Furio C. Rosati; Zafiris Tzannatos. 2002. "Child labor handbook". Social Protection Discussion Paper No. 0206. May. Washington DC: World Bank.**

► **From the Executive Summary:** This survey is ... an introduction to child labor issues, a fast expanding research and policy area. It deals with the many aspects of child labor, including its causes and effects as well as policies associated with it.

The survey takes the reader from the definition and measurement of "child" and "labor" (our first chapter) to what we call the "pathology" of child labor, the extreme forms of child exploitation, the use of children in activities that are morally repugnant or dangerous to the child's health and

even life. Between these two extremes, from the methodological aspects to the vulgar realities, we examine:

- Why do children work?
- How failures in the capital markets affect child labor?
- What is the role of household income?
- How does child labor interplay with education?
- What is the effect of household structure on child labor?
- How does parental education affect child labor?
- What does the presence or absence of social security affect child labor?
- What other policies affect child labor?
- How is the market for child labor determined?

Some topics receive a short treatment often reflecting the paucity of analysis or evidence given the "infant industry" nature of this part of economics. Others are covered in greater length only to produce ambiguous theoretical predictions and *prima facie* contradictory evidence.

Clearly this is work in progress. This is why we gave the sub-title "Version 2002" to this survey. ... We very much hope to provide a more comprehensive, more in depth treatment of the subject in the future. More importantly, we hope to be able to be in a position to provide a more adequate menu of policy options than those covered in this volume. The complexity of the issue and the sporadic evaluations undertaken so far allow only for limited generalizations.

This *Handbook* makes it clear that child labor, in all its forms, has common causes worldwide but that the efficacy of the same policy can differ substantially across countries and between rural and urban areas of the same country. Therefore, interventions should be based on a detailed knowledge of the characteristics of the target area.

► <http://www.worldbank.org/>

- **Cockburn, John. 2000. "Child labour versus education: Poverty constraints or income opportunities?". Oxford: Centre for the Study of African Economies (CSAE). 22 March.**

► **Abstract:** Child labour is commonly associated with poverty. However, the empirical evidence on this link is weak. By explicitly integrating the role of household asset profiles we provide a fuller and more nuanced explanation of child labour and schooling decisions. We use a simple agricultural household model with a missing labour market to show how the extent and composition of household asset portfolios simultaneously determine household income and the shadow wage of (demand for) child labour. Child labour-increasing (-decreasing) assets are characterised by a dominant wage (income) effect. Empirical analysis of data on rural Ethiopian households suggests that small livestock and land area are child labour-increasing, whereas oxen, bulls, ploughs, land quality and proximity to a source of water are child labour-decreasing. Various indicators – marginal effects, elasticities and predicted probabilities – are used to examine the impact of each factor. We conclude that both poverty constraints and income opportunities play important roles in the decision to send children to school or to work. We also find that work and school conflict substantially but not entirely.

- **Dar, Amit; Niels-Hugo Blunch; Bona Kim; Masaru Sasaki. 2002. "Participation of children in schooling and labor activities: A review of empirical studies". Social Protection Discussion Paper No. 0221. Washington DC: World Bank. August.**

► **Abstract:** This paper surveys the recent empirical literature on child labor and school attendance in selected developing countries. Since it has been argued that determinants of child labor and school attendance are mainly affected by poverty, parents' socio-economic characteristics (mainly employment status and educational attainment) and children's individual demographic characteristics (mainly age and gender), this review highlights how these characteristics statistically impacts participation of children in schooling and labor activities.

► <http://www.worldbank.org/>



- **Deb, Partha; Furio Camillo Rosati. 2002. "Determinants of child labor and school attendance: The role of household unobservables". Florence, Italy: Understanding Children's Work, An Inter-Agency Research Cooperation Project at Innocenti Research Centre. April.**

► **Abstract:** We develop a random effects multinomial logit model to distinguish between unobserved and observed household characteristics as determinants of child labor and school attendance. Using a semi-parametric approach, the random effect is drawn from a discrete distribution of latent classes of households. The results show that household-level unobserved heterogeneity is substantial. Household-level unobserved heterogeneity swamps observed income and wealth heterogeneity. Households that belong to the class with a high latent propensity to send their children to work are not influenced by marginal changes in the explanatory variables. Households most sensitive to changes in explanatory variables are those with a high propensity to have their children neither in school nor working. Policy interventions and changes in external conditions are likely to produce large changes in the behavior of this group of families.

- **Dehejia; Rajeev H.; Roberta Gatti. 2002. "Child labor: The role of income variability and access to credit across countries". Cambridge, MA: National Bureau of Economic Research. June.**

► **Abstract:** This paper examines the relationship between child labor and access to credit at a cross-country level. Even though this link is theoretically central to child labor, so far there has been little work done to assess its importance empirically. We measure child labor as a country aggregate, and credit constraints are proxied by the extent of financial development. These two variables display a strong negative relationship, which we show is robust to selection on observables (by controlling for a wide range of variables such as GDP per capita, urbanization, initial child labor, schooling, fertility, legal institutions, inequality, and openness, and by allowing for a nonparametric functional form), and to selection on unobservables (by allowing for fixed effects). We find that the magnitude of the association between our proxy of access to credit and child labor is large in the sub-sample of poor countries. Moreover, in the absence of developed financial markets, households appear to resort substantially to child labor in order to cope with income variability. This evidence suggests that policies aimed at widening households' access to credit could be effective in reducing the extent of child labor.

<http://www.nber.org/papers/w9018>

- **Delap, Emily. 2001. "Economic and cultural forces in the child labour debate: Evidence from urban Bangladesh", in *Journal of Development Studies*, 37.4, April, pp. 1-22.**

► **Abstract:** The relative influence of economic and cultural forces is a key area of debate amongst those exploring the causes of child work, and in wider discourse on household labour deployment. Data from Dhaka slums suggest that household poverty and income stability are important economic determinants of children's work. However, economic forces alone cannot explain child-work deployment. Evidence on the availability of adult household members to replace child contributions, and on gender and age differentials in household labour deployment, point towards the importance of cultural factors. Key cultural determinants of children's work include gender norms, age subordination and the cultural importance of avoiding idleness.

- **Dessy, Sylvain E. 2000. "A defense of compulsive measures against child labor", in *Journal of Development Economics*, 62.1, June, pp. 261-75.**

► **Abstract:** This research characterizes policies likely to trigger the onset of a growth-enhancing fertility transition, even for an economy with initially a low per capita income. The environment considered is one where children's time has an economic value, and schooling and child labor are the main competing claims on a child's time. Using a one-parent-family overlapping generations model, I argue that compulsive measures against child labor are justifiable as an integral part of an

intervention that combines incentives and regulations in order to eliminate child labor. The analysis highlights fertility and child labor dynamics as shaped by the relative cost of children.

- **Dessy, Sylvain E.; Stéphane Pallage. 2001. "Child labour and coordination failures", in *Journal of Development Economics*, 65.2, August, pp. 469-76.**

► **Abstract:** In this note, we show that a technology-based coordination failure may explain the emergence of laws restricting child labor. Child labor may arise because of the lack of a coordination mechanism between parental decisions to invest in the human capital of their children and firms' decisions to invest in skill-biased technologies. Legislative intervention in many cases helps coordinate expectations towards a Pareto-superior outcome with investments both in human capital and in skill-biased technologies.

- **Diamond, Charles; Tammy Fayed. 1998. "Evidence on substitutability of adult and child labour", in *Journal of Development Studies*, 34.3, February, pp. 62-70.**

► **Abstract:** Whether child labour displaces adult labour, giving rise to unemployment, is a matter of their substitutability in production. Using a flexible form production function fitted to data on Egypt's economy, we generate Hicks elasticities of complementarity, own and cross-price elasticities, as well as simulate employment effects on adult labour as a result of changing the fixed quantity of labour in compliance with the international call to end child labour. Adult males appear to be complementary with, and adult females substitutes for child labour, although the employment effects of banning child labour are inconclusive.

- **Edmonds, Eric, V. 2003. "Child labour in South Asia". OECD Social, Employment and Migration Working Papers No. 5. 20 May. Paris: OECD.**

► The paper presents an overview of the child labour problem in South Asia with cases studies from Nepal, Pakistan, and Vietnam. While focus has tended to be on the employment of children in the industry sector, most of the child labourers, the study states, are in the agriculture sector. Existing child labour policy tends to be misdirected, the author argues, and sanctions tend to undermine the reasons why children work. Contrary to the nimble fingers theory claiming that children have comparative advantage in some kinds of occupation, the paper shows that there is no evidence of an existing correlation between the presence of an industry in a community and child labour. The study recommends that policies should not attempt to eliminate or restrict child labour supply, but instead recognize explicitly the determinants of child labour supply. Policies that provide for financial incentives for the families of working children, efforts to make child labour more compatible with schooling and recognizing missing market for the goods and services provided by children might prove more effective.

► <http://www.oecd.org/>

- **Edmonds, Eric; Nina Pavcnik. 2002. "Does globalization increase child labor? Evidence from Vietnam". NBER Working Paper 8760. Cambridge, Mass.: National Bureau of Economic Research.**

► **Abstract:** This paper considers the impact of liberalized trade policy on child labor in a developing country. While trade liberalization entails an increase in the relative price of the exported product, trade theory provides ambiguous predictions on how this price change affects the incidence of child labour. In this paper, we exploit regional and intertemporal variation in the real price of rice to examine the relationship between price movements of a primary export and the economic activities of children. Using a panel of Vietnamese households, we find that reductions in child labor are increasing with rice prices. Declines in child labor are largest for girls of secondary school age, and we find a corresponding increase in school attendance for this group. Overall, rice price increases can account for almost half of the decline in child labor that occurs in Vietnam in the 1990s. Greater market integration, at least in this case, appears to be associated with less child labour. Our results suggest that the use of trade sanctions on exports from developing countries to eradicate child labor is unlikely to yield the desired outcome.

► <http://www.nber.org/>

- **Edmonds, Eric; Carrie Turk. 2002. "Child Labor in transition in Vietnam". February. Washington, DC: World Bank.**

► **Abstract:** Vietnam experienced a dramatic decline in child labor during the 1990s. The aim of this study is to explore in detail this decline and to document the heterogeneity across households in both levels of child labor and in the incidence of this decline in child labor. We find a strong correlation between living standards improvements and child labor so that much of the variation in declines in child labor can be explained by variation in living standards improvements. Ethnic minority children and the children of recent migrants appear to remain particularly vulnerable even by the late 1990s. Children of all ethnicities in the Central Highlands appear to have missed many of the improvements in the 1990s while children in the rural Mekong and in Provincial Towns have experienced the largest declines in child labor. Our results suggest embedding efforts against child labor within an overall anti-poverty program. We notice that the opening or closing of household enterprises seems to be associated with increases in child labor. Hence, attention should be devoted to the activities of children in the government's current program to stimulate non-farm enterprises.

► <http://www.worldbank.org/>

- **Ersado, Lire. 2002. "Child labor and school decisions in urban and rural areas: Cross country evidence". FCND Discussion Paper No. 145. Washington DC: Food Consumption and Nutrition Division, International Food Policy Research Institute. December.**

► **Abstract:** Child labor is widespread in developing countries, but its causes are debatable. Poverty is considered the primary reason, but many theoretical and empirical analyses show that other factors, such as lack of access to credit, poor school quality, and labor market opportunities play equal or even greater roles in the decision to have children work. This study surveys the existing literature and, taking into account urban-rural divides, aims to shed light on the debate with empirical evidence from Nepal, Peru, and Zimbabwe. We find that while poverty drives child work and schooling in rural areas, it does not appear to significantly influence such decisions in urban areas. This suggests that policies such as trade sanctions or a ban on child labor in rural areas could have an adverse effect as child labor decisions in such areas are more likely a response to poverty and subsistence requirements. Similarly, improving access to credit has greater potential for alleviating child labor and enhancing school enrollment in rural than urban areas, particularly in Nepal and Zimbabwe. On the other hand, the availability of alternative childcare options appears to considerably decrease child labor and create conditions for higher school attendance rates in urban than in rural areas. Finally, evidence from all three countries indicates that efforts to bolster adult educational levels and wages will help curb the prevalence and intensity of child labor and improve the likelihood that children stay in school.

► <http://www.ifpri.org/>

- **Galli, Rossana. 2001. *The Economic Impact of Child Labour*. Decent Work Research Programme Discussion Paper DP/128/2001. Geneva: International Institute for Labour Studies, ILO.**

► **Abstract:** The paper contains a theoretical discussion and a literature survey on the economic impact of child labour. [Four] main categories of economic impact of child labour are analysed: 1) the effects of child labour at the micro family level, particularly on family poverty both in the short and in the long run; 2) the effects of child labour on long-run growth and social development through a number of different transmission mechanisms; 3) the international economic effects of child labour, particularly on foreign direct investment; and 4) the effects of child labour on adult labour market.

<http://www.ilo.org/>

- **Grimsrud, Bjorne. 2001. "Measuring and analysing child labor: Methodological issues". Social Protection Discussion Paper No. 0123. Washington DC: World Bank. October.**

► **Abstract:** Current statistics on child labor are generally based on economically active children. This paper will argue that these figures are not a workable proxy for data on child labor, generating numbers of child laborers and their gender composition that do not represent the group described by the international definition of child labor. This raises the question of reliable alternative ways of measuring children's activities with the aim of analyzing the incidence of child labor. The paper addresses this and proposes a child labor module that can be linked to surveys of labor force or living conditions. It also proposes some ideas for how to analyze data on children's activities and child labor.

► <http://www.worldbank.org/>

- **Grimsrud, Bjoerne. 2001. "A comparison of survey instruments for collecting data on child labour". November. Florence: Understanding Children's Work Project**

► **Executive Summary:** This report contains a comparative analysis of the household survey instruments developed or used by the three agencies ILO, UNICEF and the World Bank for the purposes of collecting information on child labour. In addition, the usefulness of input from other household surveys, such as the USAID DHS, and qualitative instruments such as the ILO-UNICEF rapid assessment tool, on child labour measurement instruments is assessed.

The report explains the similarities and differences in the various survey instruments by comparing sampling sizes and methodologies; analysing the questionnaires by clarifying who is asked what, age limits, the definitions used etc.; and comparing and contrasting SIMPOC, MICS and LSMS data sets. These survey instruments are not static but develop over time. This has especially been the case for questions on child labour. The report therefore aims at describing this development and looks at the most recent survey methodology. In addition to this, however, it is necessary to present earlier surveys and the type of data upon which most of the existing literature on child labour is based.

The point of departure is the definition of child labour and worst forms of child labour as stated in ILO Conventions 138 and 182 and the Convention of the Right of the Child. It is striking that until recently the survey instruments on child labour have not specifically focused on trying to identify child labourers in accordance with the above conventions or national legislation. Instead, data on economically active children has been published as a proxy for child labour data. Being economically active is a term developed for monitoring adult labour market participation but, as documented in this report, it is not that well suited to measuring child labour. This paper aims at contributing to the task of developing a new common understanding among the three international agencies (ILO, World Bank and UNICEF) on core indicators for child labour and on how to capture and produce child labour data. The new special emphasis on the worst forms of child labour makes it necessary to focus particularly on these issues.

Although both the ILO SIMPOC programme and the MICS survey approach have moved towards more specific child labour tools, there is still a need to improve the methodology. The data sets comprise several surveys where important lessons have been learnt and new ways of collecting data have shown to be useful. Some of these examples are described in this report together with some attempts that were proven unsuccessful.

The last section includes a comparison of the different approaches and identifies some areas for further development in order to develop a new standard instrument for collecting data on child labour. The most recent SIMPOC instrument is the basis for much of this discussion participation but, as documented in this report, it is not that well suited to measuring child labour.

► <http://www.ucw-project.org/>

- **Grootaert, Christiaan; Ravi Kanbur. 1995. "Child labour: An economic perspective", in *International Labour Review*, 134.2, pp. 187-203.**
- **Grootaert, Christiaan; Harry A. Patrinos (eds.). 1999. *The Policy Analysis of Child Labor: A Comparative Study*. New York: St. Martin's Press.**

- **Grote, Ulrike; Arnab Basu; Diana Weinhold. 1998. *Child Labor and the International Policy Debate: The Education/Child Labor Trade-Off and the Consequences of Trade Sanctions*. ZEF – Discussion Paper on Development Policy No.1. September. Bonn: Zentrum für Entwicklungsforschung (Center for Development Research), Universität Bonn.**

► **Abstract:** This paper provides an overview of the current academic and public debate on child labor. There is growing impetus to impose international minimum labor standards banning child labor. However, this paper argues that while partial bans such as trade restrictions, voluntary codes of conduct and labeling schemes may improve the working conditions of a small percentage of child laborers in developing countries, this approach might ultimately do more harm than good. Total or partial bans on child labor have the potential to lower household welfare under realistic assumptions, as will be shown in a simple model. We argue that the underlying economic determinants of child labor supply must be addressed directly, taking into account the interrelationship between the market for schooling and that for child labor. The paper emphasizes that, with limited resources available for combating child labor, it is important to carefully judge which policies will have the greatest impact. However, as our model has also shown, under certain circumstances, major causes for the emergence and existence of child labor may be credit market imperfections and the high costs of education, so that resources should be allocated accordingly.

► <http://www.zef.de/download/>

- **Guarcello, Lorenzo; Fabrizia Mealli; Furio Camillo Rosati. 2002. "Household vulnerability and child labor: The effect of shocks, credit rationing and insurance". November. Florence, Italy: Understanding Children's Work Project.**

► **Abstract:** Building upon the social-risk management approach, this paper examines dimensions of household behavior that are important for risk management and reduction of vulnerability, beyond issues of consumption. This paper attempts to assess to what extent risk and vulnerability factors are relevant for household decisions concerning children's school attendance and labor supply. Particular focus has been given to the evaluation of the effect of shocks, credit rationing and insurance on household decisions concerning children's activities.

On the basis of a theoretical approach based on well known results relative to human capital investment decision and children's labor supply, the paper developed an estimation strategy that allows an assessment of the importance of a set of risk factors.. The analysis of the distribution of propensity scores for the "treated" and "not treated" population for the population of interest allow the conclusion that, given the maintained hypothesis of unconfoundness on observables, casual inference can be safely drawn from these estimates. Also computed is the ATE that confirms the main results obtained through the regression analysis: which indicates that credit rationing is extremely important in determining the household's decision to invest in the human capital of the children.

► <http://www.ucw-project.org/>

- **Hasnat, Baban. 1995. "International trade and child labor", in *Journal of Economic Issues*, 29.2, June, pp. 419-26.**

► **Abstract:** The International Labor Organization (ILO) estimates that at least 115 million children under the age of 15 are employed worldwide. In some countries, children constitute up to 26% of the total labor force. In recent years, developed countries have taken initiatives to eliminate child labor worldwide by linking trade and prohibition of child labor. The developing countries consider these initiatives to be disguised protectionism and claim that their children are being used to protect jobs in the developed countries. The basic cause of child labor in developing countries is poverty, but child labor is also rooted in traditions, attitudes, and customs. It is argued that attempts by the developed countries to link trade and child labor are based on questionable presumptions. Historical evidence is presented about the correlation between the spread of literacy and education and the elimination of child labor.

► **ILO. 2002. *A Future without Child Labour*. Geneva.**

► This third Global Report under the follow-up to the ILO Declaration on Fundamental Principles and Rights at Work shows how the abolition of child labour has become a global cause for the new millennium. It explores the ever-changing manifestations of child labour throughout the world, and how girls and boys are affected differently, it presents new data on the scale of this stubborn problem, and it sheds new light on its complex, interlinked causes. It charts the growth of a global movement against child labour, reviewing the various types of action being taken by the ILO, its tripartite constituents (governments, employers' and workers' organizations) and other actors at international, national and local levels. The Report concludes with proposals for a three-pillar approach to strengthen the action of the ILO in this field, building upon the wealth of experience gained by the International Programme on the Elimination of Child Labour (IPEC) in the decade since its establishment.

► <http://www.ilo.org/declaration/>

► **ILO/IPEC. 2001. *Eliminating the Worst Forms of Child Labour: An Integrated and Time-Bound Approach – A Guide for Governments, Employers, Workers, Donors and other Stakeholders*. Geneva: ILO.**

► The Guide begins with an introduction and overview of the Time-Bound Programmes (TBPs), an explanation of the focus on the worst forms of child labour and a summary of some relevant IPEC experience. The second chapter deals with situation analysis concerning the development of database and indicators. Various methodologies for collecting data and information concerning child labour and its worst forms are reviewed. Chapter 3 is an analysis of the problem of child labour. It reviews factors affecting demand for and supply of child labour, analyses the impact of economic growth on the child labour market and explains the causes and consequences of child labour and its worst forms. This is followed by a presentation of various policy and programme interventions in order to eliminate the worst forms of child labour. It highlights the role of national labour and social policies, education, social mobilization and poverty reduction programmes. The final chapter discusses the system of monitoring and evaluation for the TBPs. It explains the process of monitoring and evaluation for impact assessment and the management of intervention targets.

► <http://www.ilo.org/public/english/standards/ipec/index.htm>

► **ILO/IPEC. 2002. *Every Child Counts: New Global Estimates on Child Labour*. April. Geneva.**

► This document presents new global estimates for economic activity by children and child labour in the sense of ILO Conventions Nos. 138 and 182. Estimates on the extent of children in hazardous work and other worst forms of child labour are also provided. As far as possible, data are presented and analysed by age, gender and regional breakdown. Estimates are for the benchmark year 2000. All sources, underlying definitions and methodological steps are explained in detail.

► <http://www.ilo.org/public/english/standards/ipec/index.htm>

► **ILO; IPU (Inter-Parliamentary Union). 2002. *Eliminating the Worst Forms of Child Labour: A Practical Guide to ILO Convention No. 182. Handbook for Parliamentarians No. 3*. Geneva: ILO.**

► **The Handbook contains:**

- In the form of seven questions, a presentation of the problem of the worst forms of child labour, of international labour standards and other international treaties that are relevant to the problem – and of programmes that can be implemented to deal with it. Under each question, the Handbook provides a general overview of what parliamentarians can do to contribute to the elimination of these particularly abhorrent forms of child labour.
- In seven sections, the measures to be taken to bring about the elimination of the worst forms of child labour. They cover a wide range of actions, some of which may be taken

directly by parliamentarians. In other cases, parliamentarians may act as catalysts by virtue of their role as overseers of governments, as key political figures and as leaders of public opinion. Each measure is presented following the same outline:

**Why?** Before they act or persuade others to act, parliamentarians will have to be convinced of the purpose and the need for action. The meaning and importance of each suggested action are therefore explained.

**How?** Before they act or persuade others to act, parliamentarians need to have knowledge of what needs to be done in concrete terms.

**What is the role of parliamentarians?** For parliamentarians to be able to take effective action, they need to know where and how their work can make a difference with regard to each measure.

**What can you do?** A checklist of steps that parliamentarians can take.

- Texts of ILO Conventions and Recommendations concerning child labour and the worst forms of child labour, a model instrument of ratification and other reference material. Parliamentarians may find it easier to persuade and assist their governments to ratify the relevant Conventions, to apply the provisions of these standards and to take action against child labour, and particularly its worst forms, with the help of these materials.
- Practical additional information.

► <http://www.ilo.org/public/english/standards/ipe/index.htm>

► **Ilahi, Nadeem. 2000. "The intra-household allocation of time and tasks: What have we learned from empirical literature?", in *Policy Research Report on Gender and Development Working Paper Series No. 13*. June. Washington DC: World Bank.**

► This paper presents a synthesis of the empirical literature on intra household time use in developing countries. It discusses the importance of studying time allocated to various activities—market work for wages, work on the family enterprise and different kinds of housework— from a policy standpoint. It then reviews the empirical literature on five main areas: a) how economic incentives affect intra-household time-use; b) whether access to basic services (water, energy etc.) have gender differentiated impacts on time-use; c) if idiosyncratic shocks such as changes in employment and health affect time use by gender; d) how agricultural commercialization alters the allocation of time and tasks by gender and e) whether child care is an area that needs policy attention. Last, the paper also reviews the empirical literature on the determinants of child time allocation.

The findings of the review are that there are broad regional and rural-urban differences in the distribution of time by gender, but that the time allocation of men and women to responds to economic incentives and constraints. Whether labor and goods markets exist or not has important influence in determining how men and women alter their time allocation in response to exogenous changes in their environment. For instance, the gender-differentiated effects of changes in agricultural commercialization on time use vary according to how well labor and goods markets function. Thus economic reform that increases the access of individuals to labor, goods, credit, insurance and day-care markets will undoubtedly reduce the need for using female time resource as a "buffer". Last, while economic factors play an important role in explaining gender differences in time use, they do not explain all. The importance of social roles should also be recognized.

► <http://www.worldbank.org>

► **Jafarey, Saqib; Sajal Lahiri. 2001. "Child labour: Theory, policy and evidence", in *World Economics*, 2.1, January-March, pp. 69-93.**

► In recent years, there has been a growing effort by economists to study the causes and possible cures for child labour. This is in great part out of concern that, in the absence of proper research

and analysis, pressure groups in developed countries might force through policy measures which would end up worsening the situation facing children and their families in the developing world. As a result, many studies have come to the fore recently, of which many are theoretical and even more are based on micro-econometric research.

In this article, we review the emerging literature and highlight the policy implications of the contributions made by economists to the field. Much of this literature employs specialist techniques and is therefore inaccessible to a non-academic audience. Also, a variety of modelling strategies and empirical methods have been used, which might obscure the connections which exist between various branches of the literature. Our aim is to represent these contributions in non-technical language and also to draw out the underlying commonalities between them.

- **Jafarey, Saqib; Sajal Lahiri. 2002. "Will trade sanctions reduce child labour? The role of credit markets", in *Journal of Development Economics*, 68.1, June, pp. 137-56.**

► We examine the interaction between credit markets, trade sanctions and the incidence of child labour in a two-good, two period model with unequally wealthy households. Both poverty and poor education quality, inter alia, are important determinants of child labour. The incidence of child labour decreases as we move from the case of borrowing constraints to the case in which poor households can borrow freely from rich ones and then to the case of perfect international credit markets. Trade sanctions can increase child labour, especially among poor households, a possibility that decreases as their access to credit improves.

- **Jensen, Peter; Helena Skyt Nielsen. 1997. "Child labour or school attendance? Evidence from Zambia", in *Journal of Population Economics*, 10, pp. 407-24.**

► **Abstract:** In this paper we investigate what affects school attendance and child labour in an LDC, using data for Zambia. Since the data comes from a household survey with information on all household members it allows us to take account of unobserved household effects by introducing household-specific effects in a logit model. The empirical analysis suggests that both economic and sociological variables are important determinants for the choice between school attendance and child labour. In particular, we find some support for the hypothesis that poverty forces households to keep their children away from school.

- **Lieten, Kristoffel; Ben White (eds.). 2001. *Child Labour: Policy Options*. Amsterdam: Aksant Academic Publishers.**

► This book aims to fill an important gap in the child labour literature by bringing together a selection of policy perspectives on child labour issues by authors who stand at the forefront of research and/or policy analysis in the field. Many of the papers comment on the changing dynamics of discourse on childhood, child work, education and the relations between them. Chapter headings:

- Children, work and education: Perspectives on policy
- The rights of the child and the wrongs of child labour: An historical perspective
- Valuing diverse approaches to child labour
- Child labour: Questions on magnitude
- Child labour and education: Revisiting the policy debate
- Child labour and its elimination: Actors and institutions
- The value of work and school: A study of working children's perspectives
- Establishing partnerships with working children and youth: Implications for research

- **Majumdar, Manabi. 2001. "Child labour as a human security problem: Evidence from India", in *Oxford Development Studies*, 29.3, pp. 279-304.**

► **Abstract:** Contemporary economists and demographers have discussed the phenomenon of child labour using a family strategy approach, focusing their attention primarily on family resources, family constraints and the cost-benefit calculus of the family head. Diverging somewhat from this conventional path and starting from the vantage point of human security and development, this study makes a case for considering child well-being as a separate problem of its



own, much as it is related to family welfare. The paper argues that non-schooling and work of children reflect not only parental income constraints but also, more importantly, the paucity of publicly provided educational opportunities; they are the products of not just parental utilitarian calculus but of deficiencies in public policy and social institutions. With a particular empirical focus on India, it demonstrates that the burden of child labour as well as the onus of educational deprivation are disproportionately borne by different population groups in the country. The paper concludes that in considering strategies to combat child labour, the school reform point of view and correlatively the expansion of an educational opportunities perspective should enter the current political and policy consciousness in a significant way.

- **Mergos, G.J. 1992. "The economic contribution of children in peasant agriculture and the effect of education: Evidence from the Philippines", in *Pakistan Development Review*, 31.2, pp. 189-201.**

- **Nardinelli, Clark. 1990. *Child Labor and the Industrial Revolution*. Bloomington: Indiana University Press.**

- **Nielsen, Helena Skyt; Amaresh Dubey. 2002. "Child labour in rural India: A micro-economic perspective", in *Indian Journal of Labour Economics*, 45.3, pp. 479-496.**

► **Abstract:** In an empirical micro-economic analysis that allows individual heterogeneity, are tested four main hypotheses on the basis of the recent macro-economic literature on child labour: the substitution, subsistence, capital market and parental education hypotheses. Using four Indian data sets, we find that at most, two-thirds of the increase in school-enrolment from 1983 to 1999-2000 is explained by an increase in both household incomes and in parental education. Hence, more than one-third is left unexplained, which leaves room for explanations related to other factors such as access to schools or traditions and norms. An increase in the need for and value of substituting children for working household heads exerts a small counteracting effect.

- **OECD. 2003. *Combating Child Labour: A Review of Policies*. Paris: OECD.**

- **Psacharopoulos, G. 1997. "Child labor versus educational attainment: Some evidence from Latin America", in *Journal of Population Economics*, 10, pp. 377-86.**

- **Rammohan, Anu. 2000. "The interaction of child labour and schooling in developing countries: A theoretical perspective", in *Journal of Economic Development*, 25.2, December, pp. 85-99.**

► **Abstract:** This paper analyses the interaction between child labour and schooling in developing countries. A theoretical framework is developed, where fertility and schooling decisions are made in an environment where children contribute through child labour when young and provide old-age security as adults. The model demonstrated that the child wage rate, which is also the opportunity cost of schooling, is a crucial determinant of total fertility. An increase in the child wage rate leads to lower schooling investments and higher fertility levels. However, changes in schooling costs have no impact on fertility decisions. They only affect the allocation of children's time between schooling and child labour.

- **Rammohan, Anu. 2001. "Development of financial capital markets and the role of children in economic assets", in *Journal of International Development*, 13.1, January, pp. 45-58.**

► **Abstract:** This paper examines the link between development of financial markets, old-security and fertility, when child labour is prevalent. The model demonstrates that when returns from financial capital markets increase, fertility levels and investment in children's schooling are reduced, but child labour levels increase. However, the return to child labour is also an important determinant of fertility decisions. In particular if there is a child labour market, fertility decisions are determined mainly by the child wage rate and child rearing costs. Finally, the model shows that the development of financial capital markets implies a reduction in the borrowing rates and leads to an increase in schooling investments and a reduction in adult labour.

- **Ranjan, Priya. 1999. "An economic analysis of child labor", in *Economics Letters*, 64.1, July, pp. 99-105.**

► **Abstract:** This paper shows how poverty in combination with credit constraints can give rise to the phenomenon of child labor in developing countries. It further shows how banning child labor can reduce the welfare of the households intending to send their children to work, and suggests some alternative policies.

- **Ranjan, Priya. 2001. "Credit constraints and the phenomenon of child labor", in *Journal of Development Economics*, 64, pp. 81-102.**

► **Abstract:** This paper develops an overlapping generations general equilibrium model where inefficient child labor arises due to credit constraints. It derives a positive relationship between inequality in the distribution of income and the incidence of child labor. Looking at policy implications, it shows how trade sanctions against countries using child labor may fail to reduce its incidence. It discusses some alternative policies to reduce the incidence of child labor.

- **Ravallion, Martin; Quentin Woden. 2000. "Does child labour displace schooling? Evidence on behavioural responses to an enrollment subsidy", in *Economic Journal*, 110.462, March, pp. C158-75.**

► **Abstract:** It is often argued that child labour comes at the expense of schooling and so perpetuates poverty for children from poor families. To test this claim we study the effects on children's labour force participation and school enrollments of the pure school-price change induced by a targeted enrollment subsidy in rural Bangladesh. Our theoretical model predicts that the subsidy increases schooling, but its effect on child labour is ambiguous. Our empirical model indicates that the subsidy increased schooling by far more than it reduced child labour. Substitution effects helped protect current incomes from the higher school attendance induced by the subsidy.

- **Ray, Ranjan. 2000. "Child labor, child schooling, and their interaction with adult labor: Empirical evidence for Peru and Pakistan", in *World Bank Economic Review*, 14.2, pp. 347-67.**

► **Abstract:** Using data from Peru and Pakistan, this article tests two hypotheses: there is a positive association between hours of child labor and poverty, and there is a negative association between child schooling and poverty. Both of these hypotheses are confirmed by the Pakistani data, but not by the Peruvian data. The reduction in poverty rates due to income from children's labor is greater in Pakistan than in Peru. The nature of interaction between adult and child labor markets varies with the gender of the child and the adult. In Peru rising men's wages significantly reduce the labor hours of girls, whereas in Pakistan there is a strong complementarity between women's and girls' labor markets. Both data sets agree on the positive role that increasing adult education can play in improving child welfare.

- **Rodgers, Gerry; Guy Standing (eds.). 1981. *Child Work, Poverty and Underdevelopment*. Geneva: ILO.**

► This study looks into the causes, functions and consequences of child work. Its nine chapters, by different authors, focus on the determinants and consequences of child work and on conceptual ambiguities, and suggest research techniques for empirical analysis. Chapter headings:

1. The economic roles of children: Issues and analysis
2. Perspectives and data requirements for the study of children's work
3. The employment of children in Kano
4. The child in Africa: Socialisation, education and work
5. The exploitation of children in the "informal sector": Proposals for research
6. Urban poverty and child work: Elements for the analysis of child work in Chile
7. The economic roles of children in India: Methodological issues
8. Household and non-household activities of youths: Issues of modelling, data and estimation strategies

9. Labour market structure and reproductive behaviour in rural South Asia

- **Rogers, Carol Ann; Kenneth A. Swinnerton. 2000. "Inequality, productivity, and child labor: Theory and evidence". 5 April. Mimeographed.**

► **We extend the "general model" in Basu and Van (1998) to allow for different types of households, and the model in Swinnerton and Rogers (1999) to allow for a more general utility function. Our new finding is that while in higher-productivity countries with child labor, a more equal income distribution can reduce or eliminate child labor, in low-productivity countries, a more equal distribution of income can exacerbate child labor. Econometric specifications studying child labor among 10-to-14 year olds yield results broadly consistent with these predictions. This suggests that policy actions taken to reduce child labor should take into account the productivity level of the economy.**

- **Rogers, Carol Ann; Kenneth A. Swinnerton. 2002. "A theory of exploitative child labor". October, Washington, DC.**

► **Abstract:** We develop a model of exploitative child labor with two key features: first, parents have imperfect information about whether employment opportunities available to their children are exploitative or not. Second, firms choose whether or not to exploit their child workers. In our model, a ban on exploitative child labor is desirable, because it resolves the problem of imperfect information faced by parents, and therefore leads to Pareto efficiency. We also find that a ban leads to an increase in the wages of child workers, and that firm profits, even for firms that do not exploit child workers, fall. Finally, a ban has ambiguous effects at the macroeconomic level: aggregate child employment and aggregate output can rise or fall.

- **Rogers, Carol Ann; Kenneth A. Swinnerton. 2003. "Does child labor decrease when parental incomes rise?" March. Washington, DC.**

► **Abstract:** In the presence of two-sided altruism, i.e., when parents and children care about each other's utility, increases in parental income need not always lead to increases in schooling and to decreases in child labor. This surprising result derives from the systematic way capital market constraints bind as parental income rises: child labor increases as soon as parental income rises by enough to eliminate transfers from children to parents.

- **Rosati, Furio Camillo Rosati; Mariacristina Rossi. 2001. "Children's working hours, school enrolment and human capital accumulation: Evidence from Pakistan and Nicaragua". October. Florence, Italy: Understanding Children's Work, An Inter-Agency Research Cooperation Project at Innocenti Research Centre.**

► **Abstract:** We analyse the determinants of school attendance and hours worked by children in Pakistan and Nicaragua. On the basis of a theoretical model of children's labour supply, we simultaneously estimate the school attendance decision and the hours worked by Full Model Maximum Likelihood. We analyse the marginal effects of explanatory variables conditioning on the "latent" status of children in terms of schooling and work. We show that these effects are rather different, and discuss the policy implication of this finding. Finally, we use our predicted hours of work to analyse the effects of work on children's school achievements.

<http://www>

- **Rosati, Furio Camillo; Zafiris Tzannatos. 2003. "Child work: An expository framework of altruistic and non-altruistic models". Social Protection Discussion Paper No. 0305. Washington DC: World Bank. March.**

► **Abstract:** In this paper we present and confront two approaches to modeling child labor. The first assumes that parents are altruistic towards their offspring, while the second sees children as an asset to parents, especially in terms of old age security. The paper also extends the analysis to consider fertility as endogenous and jointly determined together with children's activities.

The paper uses a simple basic model that tries to frame the main effects discussed in the literature, while providing some novel results in terms of the consequences of treating fertility as endogenous and of the effects of uncertainty in expected old age transfers from children.

► <http://www.worldbank.org/>

► **Salazar, María Cristina; Walter Alarcón Glasinovich (eds.). 1998. *Child Work and Education: Five Case Studies from Latin America*. Aldershot: Ashgate.**

► **From back cover:** In recent years research, as well as the results of practical programmes, has led to a clearer understanding of the relationship between child work and education. It is increasingly evident that child work is not entirely the result of economic need or exploitation. Frequently it is the failure of the educational system to offer adequate, stimulating and affordable schooling that encourages children to drop out in favour of work that appears to offer advantages more relevant to their everyday lives. Parents too may undervalue the role and purpose of a school that provides inadequate preparation for the future and often see a job, including home-based work, as a positive alternative to crime, delinquency or begging.

Consequently, while a distinction needs to be made between ‘formative child work’ and ‘harmful child work’, in certain situations and cultures the phenomenon is not always seen as negative. Yet, although gratifying in the short term and sometimes even providing the means for a younger child to attend school as well as a way of learning discipline and responsibility, often these jobs provide no useful experience and do not lead to an improvement in the personal development or life chances of the child. The situation is therefore complex and requires a more realistic evaluation of the relationship between archaic pedagogy, drop out rates and child work.

These five case studies from Latin America all reveal the effects of inappropriate school curricula. Desertion of the educational system for the labour market leads to inadequate training and perpetuates the poverty trap. As part of the commitment to combating work that is detrimental to the child, major educational reform is needed. Improvements in coverage, quality and affordability should lead to greater acceptance of schooling at all levels of society and provide a greater incentive for parents and children alike to participate more fully in the system. Moreover, in cases of severe economic hardship and forced or harmful labour, practical assistance with subsidies and scholarships should be considered to remove children from such work.

Chapter headings:

1. Child work and education in Latin America
2. Brazil: Children’s strength is not in their work
3. Child labour and basic education in Colombia
4. Child work and education in Ecuador
5. School and work for Guatemalan children
6. The work and education of children in Peru
7. Conclusions and policy recommendations

► **Shelburne, Robert C. 2001. “An explanation of the international variation in the prevalence of child labour”, in *World Economy*, 24.3, March, pp. 359-78.**

► **Summary:** A public choice model is hypothesised whereby societies institute social institutions that benefit those that control the political process. Using this framework, it is argued that child labour will exist where the other factors of production gain from its practice. It is demonstrated theoretically that the non-child-labour factors are harmed by child labour in capital abundant nations; therefore, child labour is unlikely to exist in these nations. In labour abundant countries, the non-child-labour factors gain from child labour when the economy is closed. As a labour abundant economy becomes more open to international trade, those gains diminish and even turn negative as the size of the economy increases. It is shown empirically that the cross-country prevalence of child labour falls with increases in a nation's per capita income, its openness to trade, and its economic size. Given that trade openness reduces the benefits of child labour to the other members of a society, an open economy thereby reduces the society's incentive to allow

child labour. Therefore, it is argued that trade sanctions, as a remedy for child labour, may be counter-productive; however, since the model shows that the non-child-labour factors are sensitive to how economic policy affects their incomes, trade policy sanctions which sufficiently target the non-child-labour factors could possibly be effective. The model also shows that as societies become more democratic, the process sets in motion economic changes that will undermine the practice of child labour.

- **Skoufias, Emmanuel; Susan W. Parker. 2001. *Conditional cash transfers and their impact on child work and schooling: Evidence from the PROGRESA Program in Mexico*. Food Consumption and Nutrition Division (FCND) Discussion Paper 123. Washington DC: International Food Policy Research Institute (IFPRI).**

- **Swaminathan, Madhura. 1998. "Economic growth and the persistence of child labor: Evidence from an Indian city", in *World Development*, 26.8, pp. 1513-28.**

► **Abstract:** This paper examines features of child labor in an area of high economic growth in western India. Growth was associated with an increase in the number of child workers over the last 15 years. This analysis shows that children work at simple repetitive manual tasks that do not require long years of training or experience. The work is low-paying, involves drudgery and is hazardous. Work forecloses the option of school education for most children. It is argued that economic growth alone is not sufficient to eradicate child labor.

- **Swinnerton, Kenneth A.; Carol Ann Rogers. 1999. "The economics of child labor: Comment", in *American Economic Review*, 89.5, December, pp. 1382-5. Comment on Basu and Van (1998).**

- **Tuttle, C. 1998. "A revival of the pessimist view: Child labor and the industrial revolution", in *Research in Economic History*, 18, pp. 53-82.**

- **Wahba, Jackline. 2001. "Child labor and poverty transmission: No room for dreams", ERF Working Paper 0108. Cairo, Egypt: Economic Research Forum.**

► **Abstract:** It is widely believed that poverty is the main reason for child labor. Children work to ensure the survival of their families and themselves. However, little is known about the impact of child labor on poverty transmission. This paper explores the transmission of poverty through child labor. The main findings of the paper are that parents who were child laborers themselves are more likely to send their children out to work. Children are twice as likely to work if their parents were child laborers. Thus, the results suggest that child labor perpetuates inter-generational poverty.

► <http://www.erf.org.eg/>

- **Weiner, Myron. 1991. *The Child and the State in India: Child Labor and Education Policy in Comparative Perspective*. Princeton: Princeton University Press.**

► **From back cover:** India has the largest number of non-schoolgoing working children in the world. Why has the government not removed them from the labor force and required that they attend school, as have the governments of all developed and many developing countries? To answer this question, this major comparative study first looks at why and when other states have intervened to protect children against parents and employers. By examining Europe in the nineteenth century, the United States, Japan, and a number of developing countries, Weiner rejects the argument that children were removed from the labor force only when the incomes of the poor rose and employers needed a more skilled labor force.

Turning to India, the author shows that its policies arise from fundamental beliefs, embedded in the culture, rather than from economic conditions. Identifying the specific values that elsewhere led educators, social activists, religious leaders, trade unionists, military officers, and government bureaucrats to make education compulsory and to end child labor, he explains why similar groups in India do not play the same role.

- ▶ **World Bank. 2001. *A Sourcebook for Poverty Reduction Strategies: Volume 1A: Core Techniques and Cross-Cutting Issues; Volume 2: Macro and Sectoral Issues*. Washington DC.**  
▶ <http://www.worldbank.org/>
- ▶ **World Bank. 2001. *Guidelines for Joint Staff Assessment of a Poverty Reduction Strategy Paper*. Washington DC.**  
▶ <http://www.worldbank.org/>