



## CENTRE FOR SOCIO-ECONOMIC RESEARCH AND TRAINING

Working Paper: No. 2008/01

### **Explaining Child Labour in Uganda**

Adam Mugume<sup>1</sup>

April 2008

#### **Abstract**

This paper investigates the hypothesis that child labour is compelled by poverty. We examine the link between children's labour force participation and incidence of poverty using the national household survey data sets. The results show that the high incidence of child labour could be explained by incidence of poverty, and household head characteristics such as education level and gender. This suggests that government interventions geared at improving household income for the households supplying child labour will be effective in reducing child labour. Overall, child labour appears to have declined in the late 1990s but picked up again in 2003 closely following the poverty trend. In particular, high economic growth and poverty reduction appears to have been associated with declining child labour, since child labour is low skill labour.

Key words: child labour, poverty, Uganda  
JEL classification: J01, J21

---

<sup>1</sup> Centre for Socio-economic Research and Training/Bank of Uganda; e-mail:  
amugume@bou.or.ug/adam\_mugume@yahoo.co.uk

*The Center for Socio- Economic Research and Training (CSRT) was founded in 2006, on the idea that research-based policy-making is vital for equity, a key ingredient of long-term development. CSRT undertakes applied unbiased research and policy analysis that would promote the links between equity, growth and long-term development through influencing changes in policies and institutions. It strengthens research capacity for institutions and individuals through innovative approaches including training, internship placements, and outreach programmes. It facilitates knowledge dissemination and sharing on policy issues and research findings; and, facilitates partnerships between researchers, policy makers, private sector and civil society.*

[www.csrt.or.ug](http://www.csrt.or.ug)

[info@csrt.or.ug](mailto:info@csrt.or.ug)

The views expressed in this publication are those of the author(s). They do not necessarily represent those of CSRT or CSRT policy. Working papers describe research in progress by the author(s) and are disseminated to elicit comments and to further debate.

## Table of contents

1. Introduction.....	4
1.1 Objective of the study .....	5
2. Growth, poverty reduction and child labour .....	6
2.1 Trends in the child labour force participation.....	7
3. Analytical framework .....	9
3.1 Data.....	11
4. Empirical evidence.....	12
4.1 Discussion of the results .....	12
5. References.....	14

## 1. Introduction

Child labour is a complex problem in sub-Saharan Africa. Although the United Nations passed rules on child labour and the rights for the child, child labour in most African countries including Uganda remains a significant problem. Child labour in sub-Saharan Africa may be particularly exploitative and critical due to Africa's unique socio-economic, cultural and developmental circumstances, frequent natural disasters and conflicts, and famine and hunger (ILO, 1998).

Child labour is very often equated with child abuse. It is often taken to be a product of avaricious entrepreneurs seeking cheap labour and selfish parents who would prefer enjoying leisure while their children work. Whilst not denying that some of these sentiments could have some element of truth, its roots are deeply embodied in cultural, social and economic structures of societies. When we have children working and with school dropout at an alarming rate, it is much more likely that this reflects not a difference in the attitude of the parents but the problem of stark poverty where parents are compelled to send the children to work for reasons of survival. Once one accepts that sending children out to work is an act of desperation on the part of the parents, it seems reasonable to expect that parents would not send their children to work if their own wages were higher or employment prospects better.

There are many arguments against child labour. First, child labour is abusive since it is usually characterised by low wages, long hours of work under unsafe and unhealthy working conditions, and a lack of physical and social security, all of which might lead to poor physical and mental development. Secondly, child labourers are deprived of their freedom, childhood, education, fun and play, and natural development. Third, child labour is a dis-investment in human capital formation and has detrimental effect on the private and social returns from investment in education and health. Ravillion and Wodon (1999) argue that the issue of child labour is relevant to development not only because children are made to undertake work obligations that may be beyond their physical capability but also because of its long-term effect on human capital formation and on the child's future welfare. Most countries including Uganda have outlawed child labour but this might not be sufficient since most of the child labourers are found in the informal sector. However, if the poverty is the root cause for child labour, this would suggest that legislation alone cannot solve the problem. Solving the problem requires understanding of the demand and supply side forces that result in high incidence of child labour.

The most common response to child labour has been to legislate against it (White, 1994; Bonnet, 1993). This, although a well-meaning intervention can be counterproductive, moreover, legislation typically covers the formal sector whereas in the case of Africa, we are mainly dealing with an agricultural society in which labour occurs within the household. In addition, most of African rural societies, societies do not consider child labour as a delinquent activity. Child labour is often seen as teaching the child survival skills and it is a means of social integration (Grootaert, 1998). On the other hand, childhood is probably the best time for acquiring knowledge from the formal education system since schooling is an investment in human capital, which yields a return in the labour market. In that sense, schooling is a preferred alternative to child labour (Grootaert, 1998). Therefore, understanding the participation behaviour of the household in their decision of whether to send a child to school and/or to work could help to

formulate appropriate education and labour policies to remove obstacles to one of the most important long-term objectives of any poverty-conscious economy.

However, the concept of child labour in Uganda like any developing country is problematic since it can apply to a range of activities, which children do. They can range from domestic work to wage work. This suggests that the estimate of child labour would vary depending on how we define work, how we define a child, and how we collect the data. But, no matter which estimate we take, the inescapable fact remains that this is a problem of gigantic proportions.

### ***1.1 Objective of the study***

Uganda has recorded one of the most impressive economic turnarounds of recent decades. Since the late 1980s, the economy has enjoyed a period of high uninterrupted growth despite a series of external shocks. This growth has been associated with a reduction in poverty, from 56 percent in the early 1990s to about 32 percent in 2005. Despite this trend, child labour remains a problem. With sustained growth, one would have expected a much more less incidence since growth is associated with the development of new technologies, the expansion of legal and political infrastructure or the evolution of social norms which should reduce the incidence of child labour.

Why do children work? A common but not undisputed perception is that child work is compelled by the constraints of household poverty (e.g. see Basu and Van, 1998). In order to test the hypothesis that it is binding poverty constraints that compel child labour, we use household survey data to disentangle household living standards (a microeconomic variable, which differs across households) from other factors (socio-economic factors), which apply across households.

The hypothesis of interest in this paper, namely that extreme poverty compels child labour, has important implications for policy design. For instance, under this hypothesis, bans on child labour will tend to impoverish the already very poor households supplying child labour. Also, the force of any interventions in the education sector is likely to be limited unless they also lower the opportunity cost of sending a child to school. Since the marginal utility of consumption increases very rapidly as people get close to subsistence, creating matching increases in the marginal return to education may not be in the scope of policy. Thus, if subsistence poverty drives child labour, then reducing school fees or improving school quality (as in the Universal Primary Education) may have little impact, while policies that compensate families for taking their children out of work and putting them in school will tend to work.

Although child labour has ranged between 15 to about 8 percent of school going children in Uganda between 1992 and 2003, there has not been any formal empirical analysis on the link between child employment and the economic and social forces. There is a need to understand the determinants of child labour and thus to understand the potential impact of policies like the Universal Primary Education and poverty reduction strategies on child labour. This papers therefore fills this gap by examining the link between poverty and child labour.

The plan of the rest of the paper is as follows. Section 2 presents some basic information on growth, poverty trends and child labour in Uganda. Section 3 presents a basic model to analyse child labour. Section 4 presents empirical evidence and discussion of the results.

## **2. Growth, poverty reduction and child labour**

Growth is the most important long-run driver of poverty reduction and child labour. Thus, pro-poor growth concerns of raising ability of the poor to participate in a country's growth, which could depend on the poor's links to the labour market, could have an important effect of child labour. Key conditions for the design of growth-enhancing policies that could have an impact on reduction of child labour stem from a proper understanding of the functioning of the labour market and the causes of child labour. If labour markets are working efficiently, there would be little concern about child labour. The causes of child labour are thus intertwined with poor labour markets. Indeed, it has long been recognized that the labour market is a key determinant of individual welfare. It has a direct influence on household resources, because the poor derive the majority of their monetary income from selling their work force. In addition, the labour market is an important channel in the transmission process of shocks on economic activity, employment, relative prices, and resource allocation. For instance, labour market segmentation could play a key role in shaping the effects of labour market reforms on resource allocation since in the presence of a low degree of worker mobility, a segmented labour market contributes to persistent wage differentials that may hinder the resource allocation in the face of shocks. The purpose of this paper is therefore to improve the understanding of the working of the Uganda's labour market, point to the gaps in knowledge and areas for future research. The motivation is based on the fact that availability of decent employment opportunities is crucial for preventing poverty and reducing vulnerability and that there is a strong link between anti-poverty and labour market policies. Moreover, since Uganda's economy has gone through fundamental structural shifts and has recorded an impressive economic growth, it is important to understand how these have spilled over into the labour market.

Labour markets in developing countries like Uganda differ markedly in important ways from those operating in developed countries. Key structural differences are the importance of the agriculture sector in economic activity, which implies that employment tends to display a marked seasonal pattern and the importance of self-employment. These structural differences imply that standard labour market concepts used in the literature on developed world such as employment and unemployment, do not necessarily have the same meaning, and must therefore be interpreted with caution.

In general, Uganda's labour market is characterized by duality and can typically be distinguished in three sectors. First, is the deeply entrenched segmentation between a relatively small and relatively protected formal sector and a large, unprotected, under-capitalized informal sector. This sector is also characterized by self-employed individuals or small, privately owned enterprises producing mainly services and other non-tradables, workers in the informal enterprises and unpaid family workers. Activities in this sector rely mostly on the provision of labour services by owners and their families, but also occasionally on paid labour without limited formal employment contract. Job insecurity is pervasive, wages are highly flexible and substantially lower than those in the formal sector, and workers get very few benefits from their employers. Labour laws do not apply

and even when it does, enforcement is weak and spotty at best and remains outside the realm of social insurance. In most part, the informal sector is a risk management mechanism, i.e. part of a household income diversification strategy aimed at securing stable levels of consumption. In this view, labour supply patterns of self-employment, education decisions, investment in social capital, and accumulation of physical capital are linked together through a joint intertemporal optimisation problem in which households seek to maximize welfare and reduce its variance over time.

The second segment of the labour market is the formal sector, comprising the public sector, medium and large enterprises that hire workers on the basis of formal contracts. Workers and employers are subject to various labour market regulations, enjoy better working conditions, better pay (particularly in the public sector), have access to fringe benefits such as pension and health care and benefits from job security. Employers, in particular, provide a variety of benefits such as a pension plan, health insurance, and relative job security to their workers.

Third, in Uganda, like any developing country, agriculture still employs the greatest majority of the labour force in rural areas. The rural segment is characterized by a large share of self-employed persons and unpaid family workers. The functioning of rural and urban labour markets differs considerably in at least three respects. First, the heterogeneity and diversity of production in urban areas requires a wider variety of competence and skills among workers. Second, seasonal and climatic effects on production in urban areas are less pronounced than in rural areas. Third, urban production activities are more concentrated geographically than in rural agriculture. Consequently, the proportion of wage earners in total employment tends to be much lower.

### ***2.1 Trends in the child labour force participation***

The issue of child labour could be very controversial due to lack of a common understanding of the term. The term covers a wide range of ethical, social, economic and legal issues (Grootaert and Kanbur, 1995). Whether all kinds of work activities including unpaid work on the family farm, on household enterprises, and domestic work in own household on a full-time basis, which may be detrimental to the health, education and normal development of the child, should be taken as child labour or whether to view child labour as wage employment only, are issues not yet resolved. Any activity other than study or play, remunerated or unremunerated, carried out by a person under the age of 15 is regarded as child labour by the international labour office. The ILO Convention No.138 specifies the age above which a person may participate in economic activities. The UN Convention on the Right of the Child defines children as all individuals under the Age of 18. The overriding principle in these conventions is that work should not interfere with the education and the fullest mental and physical development of the child.

Perception about who counts as a child and what constitutes labour may differ across cultures. Many societies in Africa may consider children's work and domestic duties as part of the socialisation process through which children learn important skills, which are necessary for their survival in the future. The view that only work performed by a child outside the domestic sector should be considered as harmful work would be too restrictive and will exclude a significant number of child labourers. Most research on child labour has been based on the determinants of school attendance. Although school

attendance cannot be considered the inverse of child labour, whatever promotes school attendance is likely to deter child labour. The literature on the determinants of school enrolment has established that the most important determinant of school enrolment is household income level seems as parents would not send their children to working if their own welfare was higher or income better (ILO, 2002).

The Uganda economy grew at a yearly average rate of about 6.3 percent during the period 1987-2004, amidst difficult international environment with deteriorating terms of trade. Growth is the most important long-run driver of poverty reduction and therefore pro-poor growth concerns the ability of the poor to participate in a country's growth. Thus, this growth was accompanied by substantial structural shifts and has been accompanied by substantial poverty reduction, lifting about four million people from poverty in the period 1999/00-2002/03.

Between 1991 and 2003, the structure of the economy changed, and so was the structure of employment. The share of value-added contributed by the agriculture sector has steadily declined over the period, and the labour force has followed. In the most recent period, the absolute size of the agricultural labour force appears to have fallen. However, the share of the labour force in agriculture is still 1.8 times the share of agriculture in value added, indicating that there is room to shed more labour even faster if other sectors can absorb it. During this period, labour moved into industry and services. The growth of value added in industry and especially in services, did not keep up with the movements of the labour force. This probably represents a growing non-farm informal sector, with falling labour productivity. Given these productivity trends, it is no surprise that poverty increased among some households engaged in services, construction, and manufacturing. The fact remains, however, that Uganda's poverty performance was driven by growth in all sectors.

On the expenditure side, the environment was good as well. The most important determinant of poverty reduction, private consumption, showed strong growth throughout the period. Consumption growth was surprisingly strong between 1997 and 2000, when exports, imports, and external terms of trade contracted owing to falling coffee prices. It only fell after 2000, when the export price decline slowed, exports and imports recovered, as did private investment, but even then private consumption per capita grew at over 2% per annum. Uganda now has a more open and diversified economy, as exports grew from 6% of GDP to 14%, even in the face of continued price declines for its traditional products: coffee, tea, cotton, and other agricultural goods. The export sector has been kept afloat by expansion of sectors such as flowers and processed fish products. The later have grown from nothing in 1992/3 to be the second largest export by value, at 20% of non-coffee exports in value terms. Fish production was helped by an 85% rise in Cost Insurance and Freight (CIF) prices between 1999/00 and 2002/3. These trends contributed to a large decline in poverty among non-crop agriculture households.

The steady decline in internal terms of trade throughout the period, however, contributed to the difficulty the agricultural households had in moving out of poverty. Not only did the prices of their crops fall on the external market, but they also fell on the internal market as food prices fell relative to other sectors. The fall is most noticeable in 2001/2, when food and cash crop prices dropped precipitously. Had productivity not improved, this would have resulted in an even larger decline in income. Although prices recovered

some ground in the following year (partly due to a poor harvest in the East), non-food prices jumped sharply. The decline in internal terms of trade represented a loss in purchasing power for farmers, but a boom to the rest of the population, especially the urban sector, and is a factor in the widening rural-urban gap.

Taking the period as a whole, the changes are consistent and indicate: (i) a broad-based, strong increase in production over the decade, well above the growth of the labour force, and improvements in labour productivity through shifts of labour from out of agriculture; (ii) growth in private consumption outpacing the growth of population; and (iii) a decrease in poverty. However, the sector where the bulk of the poor works, agriculture, recorded the slowest growth, (although agricultural growth was positive in per capita terms), and terms of trade, both internal and external, moved against agriculture. As a result, households in this sector had a slower rate of poverty reduction.

In conjunction with the growth trend, table 2 in the appendix indicates that child labour has ranged between 7.5 percent to 15.5 percent between 2002/3 and 1992/93. With Uganda's population of about 24 million in 2003, this would translate into about 2 million children in child labour. There is an indication that child labour has generally declined between 1993 and 2003 although as the table shows there was an increase between 2000 and 2003. Several reasons explain this trend. First, economic growth during the period 1994-2000 was quite impressive and this could have resulted in tremendous payoffs in child labour reduction particularly at the turn of the 20<sup>th</sup> century. Economic growth tapped off at the beginning of the century and this could have resulted in the increase of poverty and child labour. Second, the Universal Primary Education (UPE) programme initiated in 1997, with the primary goal of providing the minimum necessary facilities and resources to enable children of school-going age to enroll and complete the primary cycle of education could have contributed to the reduction in child labour. This policy abolished tuition and other costs (e.g. building fund, Parents Teachers' Association contributions) in public primary schools, and eliminated other barriers such as uniforms, which were a major hindrance to attendance by poor children. However, quality has become an issue, as overcrowding of classrooms, unavailability of teaching materials, and lack of trained teachers as well as money to pay their salaries, have remained obstacles that could frustrate the impact of UPE. For instance, out of the 2.2 million pupils enrolled in primary one in 1997, only about 33 percent reached primary six by 2002 and 22 percent reached primary seven in 2003 (PEAP, 2004, pp. 170). This could have contributed to the observed increase in child labour between 2000 and 2003.

Overall, as the economy experienced sustained reasonable economic growth and transformation over the last 18 years, demand for low skill labour has fallen and since child labour is largely low skill, it has declined.

### **3. Analytical framework**

Children's participation in work activities is primarily dictated by the decision of their parents, although in some isolated cases the children themselves may have decided to work. Families do not send their children to work because they do not want them to have a bright future and lead a normal life. On the contrary, most parents will sacrifice everything they have to ensure that their children lead a life that might be better than theirs. The basic question is then what explains this high incidence of child labour. In most empirical analyses child labour tends to concentrate on the 6-14 year age group. We

follow the same and define child labour as an economically active school and going age, under 15. We define economically active as wage employment, self-employment, and domestic worker not at school.

There could be several reasons why children participate in work, for example, the level of education of both the children and their parents, the level of household income and the household size. By far, the most important supply side factors propagating child labour could be poverty and lack of educational alternatives. Many studies have shown that parents send their children to work primarily because they want to increase the household income (Blanc, 1994; Basu and Van, 1998; UNICEF, 1997). Children are also forced to work as part of a survival strategy to minimise risk of interruption of the income stream of the family. For example, because of failed harvest or loss of employment, particularly when the family income is inadequate to sustain life in the household. In other words, child labour is a response by poor households to satisfy basic family requirements. By sending their children into labour market now, households may not appear to be following a rational economic behaviour, but their options between short-term survival and long-term development are extremely limited. The prevalence of acute poverty and the need of poor households to keep children working to ensure income security make it impossible for them to invest in their children's education. Along this line, it is likely that parents who send their children to work are those living below the poverty line and single parent households particularly female-headed households.

Children could also be put into work due to lack of educational opportunities. Children tend to be available more readily to participate in the labour market when education is not available or when the available form of education does not meet the criteria of affordability, quality, and relevance. Some parents may also think that learning by doing could be more valuable than the education provided in schools and thus, will not prefer school for their children to liquidity of their immediate income. Children who have dropped out of school are also potential child workers.

Given the dichotomous nature of the two decisions an easy modelling strategy is to simply estimate separate dichotomous binary choice models (probit or logit models) to capture the influence of socioeconomic variables on households' decision.

Suppose that work is represented by  $W$  where  $W = 1$  if the child works and 0 otherwise. Similarly, school is represented by  $S$  where  $S = 1$  when the child is enrolled in school and 0 otherwise. The underlying utility function, which ranks the preference of the  $i^{th}$  child, is assumed to be a function of child-specific attributes ( $X$ ) for example, age, sex, household characteristics, etc and a white noise disturbance term,  $\varepsilon$ .

$$U_{i1}(X) = \beta_1 X_i + \varepsilon_{i1} \text{ for work/school and}$$

$$U_{i0}(X) = \beta_0 X_i + \varepsilon_{i0} \text{ for none work/school}$$

The child will fall in work or school alternative if and only if  $U_{i1} > U_{i0}$ . Thus, for the child  $i$ , the probability of work or school is given by:

$$\Pr ob(1) = \Pr ob(U_{i1} > U_{i0}) = \Pr ob(\beta_1 X_i + \varepsilon_{i1} > \beta_0 X_i + \varepsilon_{i0}) = \Pr ob[\varepsilon_{i0} - \varepsilon_{i1} < (\beta_1 - \beta_0)X_i]$$

$$\text{Therefore, } \Pr ob(1) = \Pr ob(\varepsilon_i < \beta X_i) = \Phi(\beta X_i),$$

where  $\Phi$  is the cumulative distribution function of  $\varepsilon_i$ .

Thus, for a child  $i$ , the probability of being a child worker and be enrolled in school, respectively, is given by (Greene, H.W., 2000, pp.849):

$$\Phi_w(\beta_w X_{iw}) = \int_{-\infty}^{\beta_w X_{iw}} \frac{1}{\sqrt{2\pi}} \exp\left(-\frac{t^2}{2}\right) dt \text{ for work}$$

$$\Phi_s(\beta_s X_{is}) = \int_{-\infty}^{\beta_s X_{is}} \frac{1}{\sqrt{2\pi}} \exp\left(-\frac{t^2}{2}\right) dt \text{ for school.}$$

The two equations can be estimated consistently by individual single equation probit methods. However, this is inefficient in that it ignores the correlation between the disturbances  $\varepsilon_w$  and  $\varepsilon_s$  of the underlying stochastic utilities function associated to work and school, respectively. It could be that various decisions within the household interact and often are taken simultaneously. In this case, a bivariate probit model is employed to circumvent inadequacies of the single probit or logit model.

Biprobit fits maximum-likelihood two equation probit models. It is based on the joint distribution of two normally distributed variables and is specified as:

$$\Phi(W, S) = (2\pi\sigma_w\sigma_s)^{-1} (1 - \rho^2)^{-\frac{1}{2}} \exp\left(-\frac{\varepsilon_w^2 + \varepsilon_s^2 - 2\rho\varepsilon_w\varepsilon_s}{2(1 - \rho^2)}\right)$$

Where  $\rho$  is the correlation between  $W$  and  $S$ , and,  $\sigma_w$  and  $\sigma_s$  are standard deviations of the marginal distributions of  $W$  and  $S$ , respectively.

### 3.1 Data

The data used are from Uganda's National Household Surveys (UNHS) of 1992/3, 1996/7, 1999/00 and 2002/3. However, these do not form a panel, thus we use cross section approach. By International Labour Organisation (ILO) conventions, work is defined as effort that results in a marketable output. This is reported in the surveys under two subcategories: wage work (for which wage earnings are recorded) and work on household-run farms and enterprises (for which there is no explicit remuneration). Individuals are classified as participating in work if they report having worked at least 1 hour in the week preceding the survey. Hours of work are recorded for this preceding week. The surveys also provide an estimate of the annual average of weekly hours of work, which smoothes over seasonal fluctuations. The latter is the definition of hours adopted in this analysis, although the results are robust to using the other definitions.

#### **4. Empirical evidence**

As noted in the preceding section, there could be several reasons why children participate in work activities. We summarise these in an empirical equation as the level of education of the children and their parents, as well as a number of social and demographic variables could individually and collectively affect the incidence of child labour. We also include a dummy for female headship to allow for heterogeneity in preferences between men and women, and for any vulnerability of the female-headed household that is not reflected in income. The education level of both parents is included to capture preferences for education and the efficiency of household production of human capital (e.g. Behrman et al., 1999). We also include a quadratic in child age. The results of the estimation are summarised below.

##### ***4.1 Discussion of the results***

For robustness check, we use both the probit and bi-probit models. The results are appended in tables 3 and 4. The results obtained by both methods are generally comparable. The empirical evidence points to the fact that poverty, female-headed households, household size, and a child being female increases the likelihood of a child being a child worker. According to poverty characteristics in Uganda, poor household are generally larger than the non-poor ones and female-headed households are also likely to be poor. This suggests that poverty could be an overriding factor in explaining child labour.

Poor denotes a dummy for child living in a poor household, Ys represent years of schooling for the child, educ of HH head represent the years of schooling for the household head, Hhsize household size, and Hhfem denotes household headed by a female.

The results also indicate that the higher the wage rate, the less likely a child is likely to be a child worker. So it seems that children work because their households are very poor in the specific sense that income exclusive of child earnings falls below subsistence requirements, so that child work is necessary. Then children will appear to work towards a target income, which is the shortfall between subsistence needs and other income. In this case, an increase in the wage will induce a reduction in child labour.

The hypothesised link between the incidence of child labour and poverty is confirmed by the results. The wealthier the household the less likely that a child will drop out of schools and start working at an early age. The results support this as the coefficients indicate that poverty increases the likelihood of child labour. We also hypothesize that the female headed households are more prone to poverty and therefore, the more likely that children will drop out of school to fend for the household. This is also supported by the results, which indicate a positive and statistically significant coefficient. In the rural areas where the majority of the poor stay, children are more likely to fall out of school much earlier than in the urban areas, hence, the likelihood of child labour. Female children are also more likely to start paid work much earlier than their male counterparts possibly because they perceived return to their education is relatively low.

Schooling is one of the most important institutions that will have the most impact on child labour. Increased years of schooling is associated with a decrease in child labour.

That is, the more the years of schooling, the less the likelihood of a child being in child labour and the age of the child also reduce the likelihood of child labour although this is not robust in the different sample periods. The male child is less likely to be in child labour.

Overall child labour is more likely to be associated with poor households, i.e. those headed by females, those based in rural areas and those that are generally poorer. As expected child labour seems to decline with the years that child spends schooling.

## **5. Conclusions**

There are several human development issues associated with child labour particularly the compromising of this future generation especially through negative effects on children's schooling. First, there is the immediate issue of the child's physical and emotional well-being. Second, the child's future well-being may also be at stake, where a trade-off between work and school leads to lower levels of human capital investment. Third, the future productivity of an economy's labour force depends greatly on the current human capital level in children.

This paper has attempted to examine the link between socio-economic factors and child labour. While several interesting results are obtained, the major conclusions emerging from the study include evidence of strong and significant links between the likelihood of child labour and the level of poverty. The results also show that child labour is explained by high fertility rates leading to large household sizes. Schooling is one of the most important institutions that will have the most impact on child labour. There is negative correlation between years of schooling and child labour, increased years of school attendance being associated with a decrease in child employment.

Since child labour is a very complex problem that cuts across all aspect of activities-economic, social, political, cultural and legal aspects, it not possible to identify all possible policy options on the basis of results obtained from the study. The problem of child labour can only be addressed in an integrated approach, encompassing legal, economic and social measures. However, on the basis of the current empirical study, it is possible to suggest some concrete policy directions.

By far the most effective and sustainable instruments for reducing the incidence of child labour lie in the progress made to reduce poverty. In an environment where family income cannot provide children with basic necessities like food, shelter, health care and clothing, child labour will persist out of sheer necessity. Therefore, any strategy to combat the problem of child labour should be combined with some anti-poverty measures. Poverty alleviation should occupy an important place in the policy package. Interventions in the form of promoting income-generating schemes could be important mechanisms to curb the problem of child labour.

## 6. References

Basu, K., and Van H.P., (1998), “The Economics of Child Labour”, *American Economic Review*, Vol.88, No. 3, pp.450-77.

Behrman, J., Foster, A., Rosenzweig, M. and Vasishtha, P. (1999). ‘Women’s schooling, home teaching and economic growth’, *Journal of Political Economy*, Vol. 107, pp. 682–714.

Bonnet Micheal, 1993, “Child Labour in Africa, *International Labour Review*, 132(3), pp.371-389.

Greene, W.H., 2000, “*Econometric Analysis*”, Prentice Hall International, Inc., Fourth Edition.

Grootaert, C., (1998), “Child Labour in the Ivory Coast”, *World Bank Policy Working Paper*, 1905, Washington, D.C.: The World Bank, pg.459-76.

Grootaert, C. and Kanbur, R., (1995), “Child Labour: An Economic Perspective”, *International Labour Review*, Vol. 134, pp. 187-204.

International Labour Organisation (ILO), (1998), “*Economically Active Population 1950-2010*”, Geneva.

Republic of Uganda, 2004, “*Poverty Eradication Action Plan 2004/5-2007/8.*” Ministry of Finance Planning and Economic Development. Kampala

Ravallion, M., and Wodon Q., 1999, “Does Child Labour Displace Schooling? Evidence on Behavioural Responses to an Enrolment Subsidy”, World Bank Working paper 2116, Washington, D.C.

UNICEF (1997), “*The State of the World’s Children*”, Oxford University Press, New York.

White Ben, (1994), “Children, Work and Child Labour: Changing Responses to the Employment of Children”, *Development and Change* 25, pg. 849-878.

## Appendix

**Table 1: Average Annual Growth Rate of Expenditure Aggregates in Uganda, selected years, 1992-2003**

	92/93-97/98	97/98-99/00	99/00-02/03	92/3-02/3
GDP (market prices)	7.6	6.5	5.6	6.9
Private Consumption	8.5	8.8	5.7	7.4
Private Investment	12.7	3.2	5.7	10.8
Government	9.7	5.1	5.9	8.3
Exports	10.6	-8.8	0.7	10.3
Imports	7.3	-5.9	-0.1	6.6
External Terms of Trade Index	6.1	-9.6	-3.8	-2.2
Internal Terms of Trade Index	0.4	-3.8	-2.5	-2.3

Source: World Bank, 2007.

**Table 2: A profile of child labour in Uganda.**

Year	Poverty headcount	Child labour %	Rural %	Urban %	Male %	Female %
1992/93	55.7	15.5	80%	20%	58%	42%
1995/96	45	12.2	67%	33%	67%	33%
1999/00	33.8	6.4	91%	9%	64%	36%
2002/03	37.7	7.5	67%	33%	55%	45%

Source: Own calculations from UNHS 1992/3; 1995/6; 1999/00 and 2002/03

**Table 3: Probit estimates of child labour**

	Model 1 2002/3	Model 2 1999/00	Model 3 1996/7	Model 4 1992/3
Regressor	Coefficient	coefficient	coefficient	Coefficient
Constant	-3.0*	-1.1*	-0.65*	-1.5*
Poor	0.26*	0.22*	0.28*	0.28*
Hhfem	0.68*	0.79*	1.13*	0.25*
Ys	-0.17*	-0.06*	-0.27*	-0.28*
Educ for HH head	-0.182*	-0.174*	-0.198*	-0.217*
Age	-0.02	-0.18*	-0.31	-0.05*
Age <sup>2</sup>	0.01*	0.02*	0.03*	0.007*
Wage	-0.24*	-0.187*	-0.282*	-0.314*
Urban	-0.01	-0.22*	-0.22*	-0.06*
Hhsize	0.04*	0.03*	0.002*	0.04*
female	0.15*	0.14*	0.29	0.23*
<i>Pseudo – R</i> <sup>2</sup>	0.53	0.54	0.55	0.58
<i>Wald – Chi</i> <sup>2</sup>	0.00	0.00	0.00	0.00

**Table 4: Bivariate probit regression on labour and school choice of children aged 6-14 years**

	Model 1 2002/3		Model 2 1999/00		Model 3 1996/7		Model 4 1992/3	
	Work	School	Work	School	Work	School	Work	School
Constant	2.8*	-2.7*	-1.8*	-4.2*	-1.3*	-6.0*	-4.2*	-5.7*
Poor	0.30**	-0.75*	0.49*	-0.36*	0.22*	-0.07*	0.28*	-0.33*
Hhfem	0.36	-0.15	1.04*	-0.62**	5.7*	-6.6*	4.84*	-5.36*
Ys	-0.12*	0.03*	-0.16*	0.10*	-0.23*	0.25*	-0.27*	0.45*
Educ for HH head	-0.166*	0.109*	-0.149*	0.08*	-0.184*	0.09*	-0.223*	0.079*
Age	-0.85*	0.79*	-0.13*	1.08*	-0.36*	1.5*	0.12*	1.24*
$Age^2$	0.04*	-0.04*	0.015*	-0.05*	0.03	-0.08*	0.01*	-0.07*
Wage	-0.213*	0.09	-0.191*	0.112	-0.268*	0.081	-0.328*	0.152**
Urban	-0.13*	0.065*	-0.18*	0.04*	-0.013*	0.12*	-0.59*	0.05*
Hhsize	0.013*	0.01	0.02*	0.01*	0.001*	0.002*	0.04*	0.03*
Female	0.04*	-0.03`	0.13*	-0.09*	0.005*	-0.15*	0.002*	-0.16*
<i>Wald – Chi<sup>2</sup> prob</i>	0.00		0.00		0.00		0.00	
<i>RHO– Chi<sup>2</sup> (prob)</i>	-0.99(0.00)		-0.98(0.00)		-0.97(0.00)		-0.83(0.00)	