Original scientific paper UDK 331.101

Child labour in Yaoundé-Cameroon: Some lessons drawn from a survey on children*

Roger Tsafack Nanfosso¹ and Simon A. Song Ntamack²

Abstract

Although child labour is a phenomenon widely studied around the world, there are few papers that tackle the problem in Cameroon. The objective of this paper is to fill the gap by questioning the subject in Yaoundé, the capital city. But child labour phenomenon is analysed here from a questionnaire that has two distinctive features: (i) the questionnaire is exclusively devoted to child labour, and (ii) all the participants in the survey are exclusively children themselves. No adult (parent, guardian, elder, employer, etc.) was consulted and given a chance to answer on behalf of a child. This process is extremely rare in child labour, since in general individuals other than children are requested to testify and answer inslead of children. While some results obtained from a standard Logit model on the determinant of child labour are well known, the others are either not known or insignificant. We suspect that the reason is the data collection.

JEL Classification: C25, D13, O12

Key words: Child labour, Logit regression, poverty, human capital.

1. Introduction

The issue raised by child labour is of international concern because of the complexity and interest involved. The will to improve children's daily life became an urgent need with the unanimous adoption by the International Labour Organization (ILO) in June

Received: 22-06-2005; accepted: 06-12-2005.

Full Professor at the Faculty of Economics and Management University of Yaoundé II, Cameroon, P.O Box 6886 Yaoundé -Cameroon. Scientific affilitation: Microeconomics with a strong propensity for Labour Economics. Tel: (237) 223 73 89, Fax: (237) 223 79 12, E-mail: rtsafack@hotmail.com. Personal website: http://www.cm.refer.org/faseguy

² Assistant Lecturer at the Faculty of Economics and Management University of Yaoundé II, Cameroon, P.O Box 25068 Yaoundé -Cameroon. Scientific affilitation: Labour Economics. Tel: (237) 999 13 50, Fax: (237) 223 79 12, E-mail:songntamack@yahoo.fr.

1999 and by its 174 members, of Convention n° 182 on the "worst forms of child labour" and the immediate action for their elimination. This Convention underlines the urgency to eliminate all forms of child labour concerning exploitation and ill treatment, to protect the child from any form of work likely to compromise his health, education, safety and self-fulfilment (OECD, 2003).

The main reasons for the interest shown for the cause and future of children stems from the importance of child labour in the world these past years. ILO estimates that approximately 352 million children aged 5-14 are working in the world. The great majority of them, about 250 million, are found in developing countries. Among these children, 120 million are employed on a full-time basis, the remainder trying to combine work with school or other non-economic activities (ILO, 1999).

The spatial distribution of child labour in the developing countries is as follows: 61% of individuals in Asia, 32% in Africa and 7% in Latin America. Male children seem more active in general than female. The gender average structure is three boys to two girls worldwide. Moreover, child labour is a phenomenon twice more important in the rural communities than in the urban areas; this is due to the fact that child labour in the rural area is manual labour intensive.

Understanding child labour however poses some difficulties both of methodological and ethical nature. Thus, the characteristics of child labour vary significantly within the same community, the same area or the same country (Anker, 2000). Child labour brings into play aspects related either to individual rights or to economic factors:

With regard to individual rights, the child as a whole has rights that are unique to him or her emanating⁴ either from the United Nations, the ILO or from UNICEF (United Nations International Children's Emergency Fund). The aim of these rights is the protection of children through enacted laws for this purpose. In spite of the existence of the laws and rules that protect children from

Pursuant to Convention n°182, the expression "the worst forms of child labour" includes: (a) All the forms of slavery or practices such as the sale and trafficking of children, debt bondage and servitude as well as forced or compulsory labour, including the forced or compulsory recruitment of children for use in armed conflicts; (b) The use, procuring or offering of a child for prostitution, for the production of pornographic material or for pornographic performances; (c) The use, procuring or offering of a child for illicit activities, in particular for the production and trafficking of drugs, as defined in the relevant international treaties; (d) Works which, by their nature or conditions are likely to harm the health, safety and morality of a child.

It was in 1919, year of its creation, that ILO enabled the adoption for the first time of a convention concerning the laws on chid labour. Later on, the following were adopted: the Convention on minimum age (1973), the Universal Convention on the rights of children adopted by the General Assembly of the United Nations in 1989, and finally, the document which can be regarded as the most expressive document for the abolition of child labour-Convention n°182 adopted in 1999 on "the worst forms of child labour" and the immediate action for their elimination (ILO, 1999a). The goal of this one is to promote a total movement aimed at eradicating the pernicious forms of child labour, and committed to carry on a national policy intended to prohibit and eliminate any abusive form of child labour.

- work, child labour persists, taking increasingly pernicious forms like slavery, prostitution or child trafficking (IPEC/ILO, 2001).
- From the economic point of view, economic recession in developing countries from the early 80s created favourable conditions for the development of child labour. One of these conditions is particularly the development of poverty which, according to Bonnet (1993) "makes child labour inevitable".

In Cameroon, as in many developing countries, the economic utilisation of children is solicited in agricultural activities in the rural areas; the urban areas being meant for informal activities and domestic work. But the phenomenon has become urban⁵ in the country (UNDP, 1998), forcing many families to consider new strategies of survival, one of the best being the introduction of child labour (Amin, 1993). Though poverty has been accompanied by other factors such as the development of the informal economy, it has also enabled the development of child-oriented and autonomous (voluntary or distress-inclined) strategies for the child's contribution to the family budget. The issue of the determining factors of child labour therefore takes a new dimension since it enables us in this context to question the children themselves on the object and reasons for their activity.

Because the criteria for the definition of the phenomenon are different, the present study states like Diallo (2001) that child labour covers at the same time commercial and non-commercial activities, regularly carried out by individuals below 18 years within the family or outside family circles, as well as the informal and formal sectors. So, the study aims at highlighting the major determining factors of child labour in our cities, in general, and in the town of Yaoundé, in particular. After having presented the model used, we will explain the data collected before elaborating the results and recommendations of the study.

2. The model and the method

Child labour deals with a dummy variable that stems, in our questionnaire, from the following question: "do you work?" When this type of variable is to be explained econometrically, the simple linear model gives inaccurate results (Maddala, 1983). Logit⁶ Method is thus preferred: it "provides an interpretable linear model for

The degradation of the economic situation in Cameroon from the middle of the 80s increased the level of poverty, which passed from 40% of the population in 1983 to more than 51% in 1996. This situation produced a new category of poor people mainly in towns (UNDP, 1998).

Or Probit Model. The choice of the model depends on the assumptions that one makes on the distribution of errors. In all the cases, except when one handles a very great number of observations, the two models give rather close results (Amemiya, 1981) and even identical results if the following transformation is made (Liao, 1994): Logit Estimator = Probit Estimator $\times \pi / \sqrt{3}$, which is a multiplication by 1.814. Amemiya (1981) proposed a multiplication by 1.6.

dichotomous answers, and thus provides a certain number of advantages that other methods don't have" (DeMaris, 1992: 1).

Consequently, let assume a logit function in which the dependent variable is the y_i probability that a child will work $(1-y_i)$ being the probability that he will not work), represented by a binary variable having the values 1 (yes) and 0 (no). The logistic regression model of participation in work is thus expressed as follows:

$$\log \frac{y_i}{1 - y_i} = \log O_i = \alpha + \sum_{k=1}^K \beta_k x_k \tag{1}$$

where O_i represents the conditional probability to work, given the explanatory variables x_k . β represents the variation of probabilities due to a unit modification of the value of the x_k value. The multiplying version of (1) is expressed as follows:

$$O_{i} = \exp(\alpha) \cdot \prod_{k=1}^{K} \exp(\beta_{k} x_{k})$$
 (2)

in which $\exp(\beta)$ is the conditional probability ratio i.e. the change from the Os, or the odds of the occurrence of an event in relation to its non-occurrence, per modification unit of the explanatory variable; ceteris paribus. The antilog i.e. $100 \cdot [\exp(\beta) - 1]$ is the estimated variation (in percentage) of the probabilities for a unit increase in the explanatory variable (DeMaris, 1992: 46).

On the basis of primary data, it can be useful to carry out a Multiple Correspondences Analysis (MCA) in order to thoroughly examine the information collected. This operation facilitates the emergence of key variables and thus increases their relevancy for the object of our work. Briefly, it should be recalled that the principle of this method is to classify the variables in two groups, namely (i) illustrative variables, which contribute to the definition of factorial elements, such as "work" and "lack of work" for the child in our case; and (ii) active variables that constitute a set of specific characteristics for each individual of the population.

The results of the MCA feature are in appendix 1 and 2. As concerns the factorial plan of the figure in appendix 2, the illustrative items are triangles while black circles represent the active items. The surface of each item is proportional to its contribution to the production of the factorial design. Thus, on the first factorial plan which orientates itself from the right towards the left, one notices that child labour is correlated with parental poverty, uneducated children, life with a close relative other than one's biological parents, the 15-18 age group, the sex of the child, the unemployment of the parents, life in a popular residential area, the low educational level of parents, etc. It should also be noted that the lack of work is correlated with the lack of incomes, school attendance, the mother's activity, the high parental level of education, life with both parents, the non-poverty characteristic of parents, etc.

3. Data

The data used are from a fieldwork survey in which all the participants are exclusively children themselves. No adult (parent, guardian, elder, employer, etc.) was consulted and none did answer in their place. This process is extremely rare in child labour, since in general individuals other than children are requested to testify and answer in their place (see Beegle et al. (2005) and Nkamleu (2005), for a recent review of some relevant references)⁷.

The study by a questionnaire-guided interview was carried out in Yaoundé between January and March 2003. This is an interesting city from the point of view of this study because it gives an enriching image of the emergence of the phenomenon of child labour in an urban area (Kegne Fodouop (1991), MINEFI (2001)). The method used to collect information was similar to sampling based on a logically-motivated choice whose general principles, the practical organization of the survey, as well as the advantages and disadvantages are recalled by Grais (1998: 226-233). This technique of data collection makes it possible to produce, from a priori information on the population studied, a sample which resembles as much as possible the population of the city. The survey was thus carried out in the city using 306 children (of which 207 were workers and 99, non -workers) whose ages varied between 5 and 18 years. A general picture of the sample can be obtained in the table below:

Table 1: Highlights of the Survey Sample

Children	Frequency	Structure (%)
Full- time job	126	41.17
Combines labour and school activities	81	26.48
Full -time student	99	32.35
Total	306	100

Source: Survey

The MCA made it possible to select about thirty relevant variables. The statistical description of these variables is given in table 2 in which one observes the transformation that some of them had to undergo from multiple variables to dichotomous variables.

To the best of our knowledge, studies based on a survey carried out *exclusively* on children don't exist. The credibility granted to parents' answers, as opposed to that granted to children's answers, enables us to doubt the former credibility whereas parents are often the ones who sometimes shamelessly enjoy child labour, when they do not force their children to go and work.

⁸ In Cameroon, "is regarded as a child [...] any person of either sex, [...] below eighteen years" (Ministerial Decree n°17 of May 1962 relating to child labour, Article 1 Subparagraph 1).

Table 2: Descriptive statistics of the variables.

Variables	Average	Standard Deviation				
Travail	0.6765	0.4686				
Cameroun	0.9641	0.1865				
Age	14.0229	2.968				
Masculin	0.634	0.4825				
Revtrav	1366.01	1744.32				
Pmarié	0.6797	0.4673				
Tailmena	6.415	3.6459				
Frètrav	0.9379	1.5448				
Quarpop	0.8922	0.3107				
Ppauvres	0.6569	0.4755				
Ecole	0.585	0.4935				
Frèsco	3.1111	2.5078				
Rank of the child	3.1111	2.3070				
Enfainé	0.3203	0.4673				
Enfmed	0.4444	0.4977				
Dernenf	0.2059	0.4977				
Place of residence	0.2039	0.4030				
Chezpere	5.88E-02	0.2357				
Chezmere	0.1667	0.2337				
Chezhere	0.451	0.3733				
		0.4686				
Chezproch Occupation of father	0.3235	0.4686				
Sectform	0.2074	0.4570				
	0.2974	0.4579				
Sectagri	9.48E-02	0.2934				
Sectinfo	0.3399	0.4744				
Retraite	2.61E-02	0.1598				
Chominac	4.90E-02	0.2163				
Occupation of mother	0.4500	0.07/0				
Secform	0.1699	0.3762				
Secagri	0.1013	0.3022				
Secinfor	0.3464	0.4766				
Chomina2	0.3148	0.4652				
Level of schooling of father						
Sansins	5.56E-02	0.2294				
Inspri	0.3627	0.4816				
Inssec	0.2484	0.4328				
Inssup	0.1634	0.3703				
Level of schooling of mother						
Sanins	0.1078	0.3107				
Inspri2	0.4902	0.5007				
Inssec2	0.2549	0.4365				
Inssup2	7.19E-02	0.2587				
Origin zone of the child						
Zsept	0.1340	0.3412				
Zmont	0.4314	0.4961				
Zforet	0.3333	0.4722				
Zcote	6.86E-02	0.2532				
Etranger	3.27E-02	0.1781				

Source: Survey

Thus, Chezdeux, Chezmere, Chezpere and Chezproch mean respectively that the child in question lives with his two parents, his mother, his father or that he does not live with any of his two parents (lives with a close relative to whom his custody was entrusted or quite simply that, he lives alone). The role of the number of brothers and sisters in the probability to work is considered in three cases representing the elder children (Enfaine), the middle-placed children (Enfmed) and the younger children (Dernenf). The parents' occupation involves five aspects: Sectform, Sectagri, Secinfo, Retraite and Chominac, indicating respectively that the father works in the formal sector, agriculture, in the informal sector, that he is retired or inactive. It is the same for the activity of mothers in which none was mentioned as being retired; the variables considered are Secform, Secagri, Secinfor, and Chomina2 respectively to indicate that the mother concerned works in the formal sector, agricultural sector, informal sector or is inactive.

The *Ppauvres* variable is the transcription of the state of poverty of each child's parents, elaborated by taking into account a series of information related to poverty. *Tailmena* is the size of the household i.e. the number of individuals in the house where the child resides. *Frètrav* is the number of his/her brothers taking part in the economic activity. The *Quarpop* variable with two cases deals with the children who reside in a popular district contrary to those who reside in residential districts, and *Pmarié* indicates the fact that the parents are (1) or not (0) married. The sex of the child mentioned in two cases is expressed by *Masculin*, which takes the value 1 for masculine and 0 for the contrary case.

The variables which deal with the levels of education are *Sansins*, *Inspri*, *Inssec*, and *Inssup* as well as *Sanins*, *Inspri2*, *Inssec2*, and *Inssup2*, for no education, primary level of education, secondary level of education and a higher level of education respectively for the case of the mother or the father. The *Frèsco* variable gives a list of the number of brothers who are educated; while *Ecole* mentions the educational status of the child who can be educated or not. Lastly, to set up relatively homogeneous groups, certain variables were gathered to obtain large sets. Thus, according to their provinces of origin, the children were grouped in five agro-ecological zones of close cultures. Thus the northern zone (*Zsept*) comprise the children originating from the North, Far North and Adamawa; in the forest belt (*Zforet*), one finds the indigenes of the Centre, the South and the East; the coastal zone (*Zcote*) consists of the natives of the Littoral and South-West, finally the mountainous zone (*Zmont*) consists of natives originating from the West and the North-West. The foreign children constitute an entirely different zone, which we will name *Etrangers*.

4. The results and recommendations

The results that were obtained from the estimate of a Logit regression feature in table 3. The *Revtrav* variable (labour income) was excluded from the analysis because it forecasts perfectly the dependent variable (1 if the child works and 0 if doesn't) since it is evident that only working children could have an income. With time, this bond leads to a movement in the direction of the two variables. It should be observed however that the model restores well the explanation relating to child labour with a Khi-square of 212.08; for which, with a degree of freedom of 32, is significant at 1% level.

Relevant variables, because they are statistically significant in explaining the probability or non-probability for a child to work, are: *Cameroun* (nationality of the child), *Frètrav* (number of brothers actively employed), *Age* and *Age2* (the age of each child and his square), *Enfainé* (elder child), *Quarpop* (resident in a popular district), *Chezproch* (resides with a close relation or alone), *Secform* (mother working in the formal sector), *Ecole* (educated child), *Frèsco* (educated brother), *Inspri2* (mother having a primary level of education), and *Inssec2* (mother having a secondary level of education), *Zsept* (northern agro-ecological zone) and finally *Etranger* (foreign origin).

4.1. The parents' activity

The first lesson drawn from this work highlights the relation that exists between the occupation of parents and child labour. In developing countries like Cameroon, incomes generated from activities constitute the principal source of income for households, and any contribution from a family member likely to increase total family earnings is greatly welcomed. The protected employment of the father and/or mother is thus an asset for the elimination of child labour because it prevents them from running to their offspring for survival needs. The mother's activity, which is more likely to reduce significantly child labour in Yaoundé, decreases, by 86.87%, the economic activity of her children when she works in the formal sector. This situation indicates that when the parents have sufficient resources, they are less disposed to force children below working age to work. It thus highlights the idea that child labour is based on the meagreness of the incomes in households.

The report suggests a fight against child labour through the employment of parents, particularly mothers, for well remunerated and secured jobs. The increase and stabilization of incomes that result from this situation may check child labour. A better organization of professional structures aimed at training and integrating a great number of women will have, as consequence, the checking of the risk of precarity and impoverishment, which leads to child labour.

Contrary to the work of the mother, the activity of a brother, which is expressed by the *Frètrav* variable, positively and significantly influences child labour. Indeed, a

child will have 2.419 times the chance of being active in Yaoundé if he has an elder brother who is already working. The recourse to children is as a result of the difficulties experienced by urban Cameroonian families, following their dwindling purchasing power, coupled with the laying off of manpower in the formal sector (UNDP, 1998a). In order to free themselves from the insecurity caused by economic difficulties, households, which do not like taking risks, are pushed to make their children work (Amin, 1993) and benefit from the incomes, which this labour generates. Children therefore generally become car washers, mechanics, etc⁹ or engage in petty trading to help their parents (generally their mothers)¹⁰. Finally, the use of an additional child pre-supposes an abundance of manpower for large families. The budgetary constraints in this case are so strong, given the high number of individuals, and the low incomes that render indispensable, additional resources resulting from child labour. However, it is noteworthy to say that many children work in order to make some pocket money for themselves (Anker, 2000b) as we noticed in Yaoundé.

Solving this situation implies that families should be able to provide for their needs without having to resort to child labour, for only families with high incomes survive without having to send their children to work (OECD, 2003). The creation of decent jobs for parents, specifically; the idea of fostering active policies of female professional integration could increase the living standards of households and preserve the children from working.

4.2. Nationality

Child labour in Yaoundé less affects young nationals than foreign children. The report shows that children of Cameroonian nationality have a probability of 99.99% lower than expected to be economically active in the city than foreign children. Migrants whose children finds themselves very early in occupational activities are, for the most part, refugees or exiles having escaped from the economic, social and political difficulties of their countries of origin, just to be again confronted with these same difficulties in the host country. They are therefore, by their conditions, more exposed to economic precarity and vulnerability than the local residents, and try as much as possible to diversify their scarce sources of income by using child labour 11.

This is not an exhaustive list. Indeed, at the time of a study carried out in 1991 in the city, 121 jobs using children were taken note of (Kegne Fouodoup, 1991).

Let us stress that this situation is by no means contrary to that previously mentioned which hailed the mother's activity. Indeed, mothers who use the labour force of their children are those who themselves experience precarious conditions such that the recourse to children becomes indispensable for survival.

It should be noted that the restrictive character of sampling, coupled with the work of all the foreign children of our population, can increase the incidence of the labour of foreign children when compared to the case of

4.3. Seniority

The results show that child labour in the city increases with age. Each additional year increases 3.36 times the propensity of children to work. Thus, the more the child grows, the more he is fit to work increasingly since the work carried out by children requires physical effort which is often lacking at the level of children. Let us underline, however, that the tendency of this propensity to change occurs decreasingly, the coefficient of the square age being significant and negative.

The growing relation of child labour with age is strengthened by the analysis of the rank of the child in the family. It is shown that the eldest children of the family are four times more exposed to work than their younger brothers. The first-born children are the first victims of household work because of their position in the family. They always begin their work by domestic activities, then continue as house helps before moving to various economic activities of child labour in urban areas.

4.4. Residence

For children, the fact of not residing with any of his parents multiplies by at least 33.25 times, the risks to get involved in the labour market very early, as compared to their fellow children who live harmoniously with their two parents. In general, in African societies or elsewhere, the legitimate child is naturally privileged to the detriment of "adopted" children (i.e. children of parents or acquaintances whose custody is extracted).

This reaction is normal because each parent shall strive as much as possible to offer what is best for his child. Non-legitimate children shall thus pay the price for this affection. They are thus compelled to carry out all the domestic chores, and this situation obliges them to rise up early in the morning to wash the dishes, carry water, carry out housework work, cook, and prepare the "legitimate" children for classes and go to bed late at night (MINEFI, 2001). When they are not subjected to housework, they are compelled to work out of the house because they need to have their daily bread and sometimes that of the adoptive family. The great presence of these children in host families is often due to separation in their respective families of origin due to divorce or the death of one of the parents, but also as a result of financial difficulties in large families. It is thus necessary to sensitize the families on the harmony of couples, the utility of a well brought-up child irrespective of whether he/she is legitimate or not and on the need for creating up a harmony between the number of children and the income of the households.

Moreover, geographical location also significantly influences the level of child involvement in economic activity. In the city, children who live in popular districts have a probability to work 14.606 times higher than those from residential districts. This striking contrast is explained by the dispersion of resident social categories: senior officials of the administrative services and private sector or businessmen in

Table 3: LOGIT results of the participation of children in the labour market

Logit estimates				Num	ber of obs =	306					
Wald chi2 (32) = 212.0											
Prob > chi2 = 0.0000											
Log likelihood = -63.508068 Pseudo R2 = 0.670											
Variables	Odds Ratio	Std. Err.	z	P> z	f. Interval]						
		-		- ' '							
Cameroun	6.73e-09 3.360.249	1.35e-08 2.211.162	-9.381 1.842	0.000* 0.065***	1.32e-10 0.925232	3.43e-07					
Age			1			12.20372					
Age2	0.954138	0.026364	-1.699	0.089***	0.903840	1.007237					
Masculin	0.974601	0.478425	-0.052	0.958	0.372372	2.5508					
pmarie	1.759.965	1.399.222	0.711	0.477	0.370488	8.360519					
Tailmena	1.067.617	0.1737		0.688	0.776086	1.468659					
Fr?trav	2.419.826	0.688664	3.105 2.364	0.002*	1.385282	4.226977					
Quarpop	1.460.662	1.656.699		0.018**	1.581638	134.8938					
Ppauvres	1.372.849	0.789305	0.551	0.582	0.444869	4.236553					
Ecole	0.000863	0.002868	-2.123	0.034**	1.28e-06	0.581974					
Fr?sco	0.801891	0.093073	-1.902	0.057***	0.638731	1.00673					
Rank of the child											
Enfainé	4.276.676	3.368.192	1.845	0.065***	0.913531	20.02115					
Dernenf	1.636.208	1.213.692	0.664	0.507	0.382333	7.002212					
Place of residence											
Chezp?re	6.434.511	8.189.759	1.463	0.144	0.531028	77.96746					
Chezm?re	3.288.273	275.469	1.421	0.155	0.636633	16.98425					
Chezproch	3.325.895	3.175.058	3.671	0.000*	5.120483	216.0261					
Occupation of the father											
Sectform	0.476944	0.347089	-1.017	0.309	0.114556	1.985719					
Sectagri	2.034.282	2.630.942	0.549	0.583	0.161268	25.66091					
Sectinfo	0.675786	0.559526	-0.473	0.636	0.133366	3.424313					
Retraité	0.235826	0.483937	-0.704	0.481	0.004225	13.16239					
Occupation of the mother											
Secform	0.131269	0.100719	-2.646	0.008*	0.029178	0.590560					
Secagri	0.620638	1.049.102	-0.282	0.778	0.022594	17.04811					
Secinfor	1.023.243	0.689748	0.034	0.973	0.273023	3.834931					
Level of schooling of father											
Sansins	275.653	5.378.843	0.520	0.603	0.060173	126.2759					
Inspri	2.331.963	2.171.358	0.320	0.803	0.060173	14.46439					
Inspri	0.653929	0.509164	-0.546	0.585	0.373961	3.008126					
Inssec	0.033949	0.509104	-0.540	0.565	0.142130	3.008120					
Level of schooling of mother											
Sanins	5.088.072	6.053.098	1.368	0.171	0.494207	52.38385					
Inspri2	1.606.163	1.638.107	2.722	0.006*	2.176	118.5551					
Inssec2	1.397.061	1.499.802	2.456	0.014**	1.703789	114.5553					
Origin zone of the child											
Zsept	0.090560	0.084448	-2.576	0.010*	0.014561	0.563236					
Zforet	0.706002	0.370547	-0.663	0.507	0.252377	1.974978					
Zcote	0.050022	0.114252	-1.311	0.190	0.000568	4.39864					
Etranger	4.51e-10	0.000	0.000	0.000*	0.000	0.000					

Notes: The residual variables are: *Chezdeux* with regard to the place of residence of the child; *Chominac* for the father's activity, *Chomina2* for the mother's activity; *Enfmed* for the rank of the child; *Zmont* for the area of origin of the child, *Inssup* and *Inssup2* for higher educational levels of the father and mother respectively. The signs (*), (***), (***) mean significant at 1%, 5% or 10%.

residential areas, the middle class and some individuals in the popular district. Poverty and misery are daily realities in this zone; thus, there is abundant recourse to child labour.

The situation requires a more equitable redistribution of incomes, which leads reduction of the gaps between diverse social categories, the checking of precarity, misery, and all the difficulties that prompt children to work. Unfortunately, such a distribution is problematic because the reduction of the living standards of wealthy homes could oblige the said home to prompt their children to work (OECD, 2003), thereby rendering the initiated measure ineffective. However, the consequences should be marginal because the poor families are proportionally more populated

4.5. The parents' human capital

The relation that binds child labour to the low educational level of parents is another notable result. Indeed, this relation is not significant in the case of the father's level of human capital, but as concerns the mother, the propensity for the existence of child labour rises in a visible way because of the low level of human capital. Thus, mothers who have a primary or secondary level of education are 16.061 and 13.97¹² times respectively to prompt their offspring to work than those whose mothers have a higher educational level. This result underlines the important role of the woman in the education of children and justifies the need for the increasing education of the woman. The more the parent's education (the mother in particular) increases, the more the family climate is favourable for the increase of human capital.

The influence of the education of mothers can also be associated with the impact caused by the income. According to the human capital theory, a high level of education generally corresponds to a higher productivity rate and greater individual income. The educational level of the mother consequently plays an important part in the frequency of child labour in the town of Yaoundé because educated parents endeavour to provide education for their children thanks not only to their own education, but also from the income resulting from their activities.

4.6. The human capital of children

It is interesting to note that apart from the role of parents, the education of children plays a significant part in the reduction of child labour. Thus, educated children reduce by 99.913% the probability that they have to work, compared to uneducated children. According to Anker (2000b), in default of abolishing child labour, education constitutes a decisive solution for the eradication of the dangerous forms of child labour, because by being educated, the child is informed of the nature of work

¹² It should be noticed that the secondary levels of mothers' education present lesser possibilities of the economic use of children; this is a proof that child labour decreases because of the high level of parents' human capital.

and the risks to which he exposes himself. He can thus freely choose a less dangerous activity.

The education of a brother improves the useful character of education. The fact that a child has at least a brother who goes to school reduces his chances by 19.81% in getting involved in child labour. The environment in which the child is found thus influences his behaviour and dealings, as well as contributes to his education and training. It thus seems less probable for children, to prefer work to school in an environment that gives priority to intellectual activities.

It is thus a question of appealing to the authorities so that they implement programmes aimed at increasing the accessibility to schools for all strata of the population. Anker (2000b) calls upon the persons in charge of child labour policies as well as development teachers and planners, to draw lessons from the situation whereby educated children frequently carry out work that is not dangerous, and to note that these children and work are indispensable very often for the survival of the family. A laudable initiative was taken in Cameroon with the introduction of free primary education. It is to be encouraged but deserves to be accompanied by additional funds to education and training, in order to prevent young children from abandoning school immediately after having completed primary education.

4.7. Cultural origins

The last variable analysed here relates to the cultural origins of the child who takes part in education and training. Indeed, an African traditional mentality regards the involvement of the child in work (particularly household chores within the family) as a form of education, socialization and training. After having divided our population into four different cultural areas presenting some similarities, we arrived at the conclusion that the children who originate from the northern area have a probability which is 90.944% less for working than the children originating from the mountainous zone, while foreigners have a probability which is 99.99% more for being active, thereby confirming their love for early activity. Such a case is a consequence of several economic, social and cultural reasons.

First of all, let us stress that the low representation of certain cultural groups in the city can conceal the level of the activity of their children when compared to the zone considered. For example, this is the case with the northern zone, where, because of culture and the geographical environment, children are introduced in various domestic activities generally resulting in the reduction of the school attendance rates, especially among girls (Amin, 1993). This situation is in conformity with the situation noted in Yaoundé according to which young girls are more exposed¹³ to the

The kind seems significantly not to explain child labour in Yaoundé. However it is interesting to have an idea about a situation that is not in accordance with the international observations, which grant the favours of the child labour to the male sex (ILO, 1999).

activity and consequently less privileged than the boys when it comes to education. This is also the case with foreign children who are all in activity in our sample, which has as consequence, the biases of their activity in relation to the other layers of the town population.

In addition, the dynamic character of the population of the mountainous region (Bamilékés), notably in the formal and informal commercial activities, requires considerable manpower. Since the majority of their informal companies have a family nature, the recourse to child labour that is easily accessible and less expensive is always envisaged. Lastly, beyond the modes of organization, all the factors like the culture, customs and habits, religion, the social environment, which affect the living conditions of the population influence the way children are treated and consequently, have impact on child labour.

5. Concluding remarks

The child labour appears as a phenomenon whose complexity depends on economic, educational or social factors. The aim of the paper was mainly to examine the determinants of urban child labour in Cameroon. The town of Yaoundé was selected for the study since it has undergone significant urbanization. Information collected underwent various statistical and econometric analyses with the aim of providing robustness to the results and discussions that were to be produced. Three great lessons can be learned from these results:

The first lesson highlights the bond that exists between the activity of the parents and child labour. The work of a mother has a significant positive effect on that of her offspring. Associated with parameters like seniority, the activity of a brother, nationality, the place of residence¹⁴ or an additional year, the secured employment characteristic of jobs of parents indirectly worsens the effects of poverty¹⁵ on child labour. Poverty is a phenomenon which generally refers to an insufficiency of resources as well as a lack of choice and opportunities which offer better living conditions to individuals. Its recent urban phenomenon is due to the downward trend of the purchasing power of workers and the laying off of employees (UNDP, 1998b). Children will move away from the child labour as the factors that often prompt individuals to resort to it start disappearing.

The second lesson portrays the useful character of education important role of education which con confirule to eradication of urban child labour. Child labour

Popular districts, mainly poor ones, appear to be areas where almost all children involved in child labour in city do live.

Several works underlined and highlighted this relation. One can quote the explanation made by Basu and Van (1998), the empirical verification of OECD (2003) or Diallo (2001).

seems to decrease as the educational level of the parents' increases. The low level of the education of mothers, in particular, incidentally increases child labour in the town of Yaoundé. Moreover, the education of the child seems to be a determining factor in the fight against child labour in the city, with a reduction of propensity of children to be part of the manpower, which is estimated at 99.913%. It is also important for a child to benefit from a cultural environment hostile to the economic exploitation of children and a family climate of educated people. This portrays the influence of culture in the education of the child; here, mothers in some societies tend to use child labour much more than others. Lucrative activities and the education of the parents appear as the factors that obviously explain the existence of child labour in Yaoundé. This idea should however be rendered relative for several other factors are strongly correlated with it. Moreover, child labour is a very heterogeneous phenomenon due to the considerable differences between the individuals, culture and geographical areas (OECD, 2003).

Finally, some variables that are often related to the economic exploitation of the children have no statistical significance as regards our results despite their relative importance on the impact of child labour in the city. This is certainly due to the direct method used to collect information from the children concerned for the analysis of the child labour phenomenon. The majority of existing data on this field are collected either from the children's guardian or employers who benefit from the situation. Even when a section is devoted to children in the main questionnaires, the response to questions is often left to the assessment of the person who is in charge of the children. In fact, the data obtained do not provide detailed information and are even less specific to the activity of the children. They are not credible because the determining factors of child labour depend on variables favourable to the beneficiaries of child labour. Thus, the role of poverty as far as child labour is concerned must be rendered relative, because the development of the phenomenon differs from a poor family to another within the same community, and from one poor city to another in the same country (Anker, 2000b). Our research recommends the bringing together, as much as possible, of all the people directly concerned, the children in particular, when it is a question of examining their economic exploitation. The importance of their opinion in the studies carried out on "child labour" is thus highly necessary for the improvement of collected information. For these reasons, a thorough analysis of the relationship of interdependence that could exist between child labour, poverty, education and cultural influence could certainly improve our modest knowledge of child labour.

1.3125

TRACE BEFORE DIAGONALISATION.

EIGENVALUES SUMMON...

HISTOGRAM OF THE 21 PRINCIPAL EIGENVALUES

SEEN PRECISION OF CALCULATIONS:

R. Tsafack Nanfosso and S. A. Song Ntamack: Child labour in Yaoundé-Cameroon... Zbornik rad. - Sveuč. u Rij., Ekon. fak., God. 23. Sv. 2 (2005), str. 195-216

Appendix

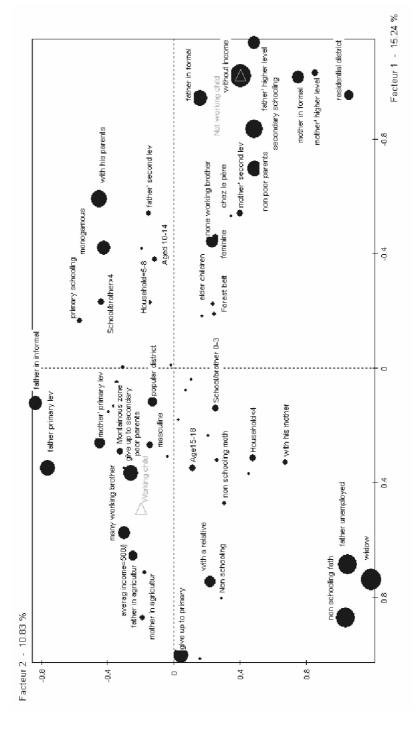
	张兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴兴	张林林铁矿安林铁铁矿铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁铁	水林葵葵涂料菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜菜 菜	非安装等的单数等等等的单数等的单数等的重要的等的。	法书书案法书书案法书书书书书书书书书书书书书书书书	张林林将安林林将将安林林将安林林州,张林林林将将李林	张林林·张林·张林·张林·张林·张林·张林·张林·张林·张林·张林·张林·张林·	张林林·张林·张林·张林·张林·张林·张林·张林·张林·张林·张林·张林·张林·	张林林·张林·张林·张林·张林·张林·张林·张林·张林·张林·张林·张林·张林·	· · · · · · · · · · · · · · · · · · ·	法外接接收款的股份股份股份股份股份股份股份股份股份股份股份股份股份股份股份股份股份股份股份	************	*********	安安安安安安安安安安安安安安安安安安安安安安安安安安安安安安安安安安安安安	***	· · · · · · · · · · · · · · · · · · ·	水林林林州林林林州林林林	经济济济济济济济济济济	法外关诉法法法法	*************************************	*************************************
PERCENT. CUMUL	15.24	26.08	33.09	39.20	44.83	50.34	55.44	60.40	65.20	69.55	73.71	77.42	80.87	84.13	87.08	89.83	92.40	94.51	96.50	98.34	100.00
PERCE NT.	15.24	10.83	7.01	6.11	5.63	5.51	5.10	4.95	4.80	4.36	4.16	3.71	3.45	3.26	2.95	2.75	2.57	2.11	1.99	1.84	1.66
EIGEN- VALUE	0.2001	0.1422	0.0921	0.0802	0.0739	0.0724	0.0670	0.0650	0.0630	0.0572	0.0546	0.0487	0.0452	0.0427	0.0388	0.0361	0.0337	0.0277	0.0262	0.0242	0.0218
NUM BER	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21

Appendix 1: Listing of the Analysis in multiple correspondences (AMC)

R. Tsafack Nanfosso and S. A. Song Ntamack: Child labour in Yaoundé-Cameroon... Zbornik rad. - Sveuč. u Rij., Ekon. fak., God. 23. Sv. 2 (2005), str. 195-216

9 ∞ 6 10 12 53 54 55 99 57 28 59 09 62 63 64 NUMB 61 105.00 172.00 112.00 69.00 99.00 91.00 104.00 138.00 50.00 52.00 150.00 33.00 273.00 194.00 162.00 74.00 67.00 101.00 94.00 134.00 201.00 84.00 207.00 99.00 WEIGHT WORDING'S VARIABL CENTRALE ZONE Chezproch Ppauvres Chominac Ppauvres Chezdeux Quarpop Sectform Secform Quarpop Revtrav Pmarié Fretrav Travail Inssup Voeuf Sexe Sexe WORDING'S METHODS given up to primary school Father's higher education Mother in formal sector Many working brothers Average income =500/j none working brother Secondary schooling with his two parents Monogamous father in residential district Not working child Uneducated father in informal sector Non poor parents in popular district without income with a relative Working child Unemployed widow father Aged 15-18 Poor parents Masculine Feminine -8.82 8.19 -12.37 -10.74 -9.39 -8.80 -8.04 -7.23 6.74 8.64 8.81 10.75 12.37 -12.37 -8.81 -6.09 5.81 6.81 8.01 8.82 -10.50-5.81 V.TEST RM02 RM05 AG03 SC02LH03 SA02OP02 **RE02** LH04 FR02 **TR02** SA02 **PP02** SE02 \Box FR01 IN04 QP01 SA01 IN01 RE01 SE01 PP01

2- DESCRIPTION OF FACTOR 1 BY METHODS



212

Appendix 2: Factorial plan: more than 19% of information

References

- Amemiya, T. (1981), "Qualitative response models: a survey", *Journal of Economic Literature*, Vol. XIX, December, pp. 1483-1536
- Amin, A.A. (1994), "The socio-economic impact of child labour in Cameroon", *Labour Capital and Society*, Vol. 27, n° 2, November, pp. 234-248.
- Amin, A.A. (1993), Le travail des enfants au Cameroun : Analyse d'une situation, IPEC/ILO, Bureau de l'OIT pour l'Afrique centrale, Yaoundé.
- Anker, R. (2000a), Conceptual and research frame works for the economics of child labour and its elimination, ILO/IPEC working paper, Geneva.
- Anker, R. (2000b), "L'économie du travail des enfants : un cadre de mesure", *Revue Internationale du Travail*, Vol.139, n° 3, pp. 289-317.
- Balepa, M. (1995), Croissance Démographique et travail des enfants, Papier présenté au Séminaire sur le Travail des Enfants au Cameroun, Yaoundé, 2-6 octobre.
- Basu, K. and Van, P.H. (1998), "The economics of child labour", *American Economic Review, Vol.* 88, n° 3, pp. 412-427.
- Beegle, K.; Dehejia, R. and Gatti, R. (2005), "Why should we care about child labour? The education, labour market, and health consequences of child labour", *The World Bank*, Policy Research Working Paper n° 3479, January
- Belot, L. (2002), "Les entreprises appelées f s'engager contre le travail des enfants", *Le Monde*, Jeudi 13 juin
- Becker, G.S. (1993), *Human capital: A theoretical and empirical analysis with difference to education*, 3rd edition, Chicago University Press, Chicago.
- BIT (1999), Le travail des enfants : faits et chiffres, Genève.
- Bhalotra, S. (2000), "Is child work necessary?" Bistrol Discussion Paper, n°00/495, Bristol University.
- Bhalotra, S. and Heady, C. (2000), "Child farm Labour: the wealth paradox", Bristol Discussion Paper, n°00/492, Bristol University.
- Bonnet, M. (1993), "Child labour in Africa", International Labour Review, Vol.132, n° 3, pp. 371-389.
- Brisset, C. (1998), "La marche des enfants rebelles", Le Monde Diplomatique, Juin
- Cockburn, J. (2000), "Child labour in rural Ethiopia: Income constraints or income opportunities", Paper presented at the CSAE conference on opportunities in Africa: *Micro-evidence on firms and households*, Oxford, April 9-10.
- Diallo, Y. (2001), "Les déterminants du travail des enfants en Côte d'Ivoire", *Centre d'Economie du Développement*, Université Montesquieu-Bordeaux IV, France.
- FINDINDS (2001), "Le travail des enfants en Afrique : Problématique et défis", n° 194, Novembre.

- R. Tsafack Nanfosso and S. A. Song Ntamack: Child labour in Yaoundé-Cameroon... Zbornik rad. Sveuč. u Rij., Ekon. fak., God. 23. Sv. 2 (2005), str. 195-216
- Grais, B. (1998), Méthodes statistiques, 3^e édition, Dunod, Paris.
- Harsch, E. (2000), "Les contraintes financières freinent le développement de l'éducation primaire en Afrique", *Afrique Relance*, Vol.14, n° 2, juillet.
- Herrera, J. (1995), "La convention sur le droit des enfants qui travaillent", Papier présenté au Séminaire sur le Travail des Enfants au Cameroun, Yaoundé, 2-6 octobre.
- HRW (1999), World Report 1999, Children's Rights, Web address: http://www.hrw.org/wr2k/crd.htm.
- ILO (2002), Every child counts, New Global estimates on child labour, Geneva, April.
- ILO (1999), Convention n°182 concerning the prohibition and immediate action for the elimination of the worst forms of child labour, Geneva.
- ILO (1992), IPEC Programme Document, Geneva.
- IPEC/ILO (2001), Combating trafficking in children for labour exploitation in West and Central Africa, Geneva.
- Kegne Fodouop (1991), "Les petits métiers de la rue et l'emploi; le cas de Yaoundé", *Editions Sopecam*, Yaoundé.
- Lemelin, C. (1998), *L'économiste et l'éducation*, Presses de l'Université de Québec, Québec.
- Liao, T.F. (1994), Interpreting probability models: logit, probit and other generalized linear models, Qualitative Applications in the Social Sciences Series, Sage University Paper n° 101
- Maddala, G.S. (1983), Limited dependent and qualitative dependent variables in econometrics, Cambridge University Press, Cambridge
- Nkamleu, G.B. (2005), "Children at risk in the agricultural sector in Sub-Saharan Africa: determinants of child labor participation in the cocoa farming of Cote d'Ivoire", Sixth Annual Global Development Conference, January
- MINEFI (2001), Enquete r indicateurs multiples (MICS) au Cameroun, 2000, DSCN, UNICEF, aout.
- MINEFI/INS (2000), Annuaire statistique du Cameroun, Yaoundé, Décembre.
- MINPAT/PNUD (2000), Etudes socioéconomiques régionales au Cameroun, Yaoundé, Février.
- Nouthe-Djubgang, J. (1995), "Santé et sécurité des enfants au travail", Papier présenté au séminaire sur le travail des enfants au Cameroun, Yaoundé, 2-6 octobre.
- OCDE (2003), Combattre le travail des enfants. Un bilan des politiques, Paris.
- Page, A. (1971), L'économie de l'éducation, Presses universitaires de France, Paris.

- R. Tsafack Nanfosso and S. A. Song Ntamack: Child labour in Yaoundé-Cameroon... Zbornik rad. Sveuč. u Rij., Ekon. fak., God. 23. Sv. 2 (2005), str. 195-216
- PNUD (1998a), Rapport sur le développement humain : la pauvreté au Cameroun, Yaoundé
- PNUD (1998b), Cameroun: coopération pour le développement, Yaoundé
- Song Ntamack, S.A. (2002), Le travail des enfants urbains au Cameroun : cas de Yaoundé, Mémoire, Université de Yaoundé II, Avril.
- Schultz, T.W. (1961), "Investment in human capital", *American Economic Review*, Vol. 51, n° 1, p.1-17.
- Tchouatieu, J. C. (1995), "Protection de la famille : des enfants travailleurs", Papier présenté au Séminaire sur le Travail des Enfants au Cameroun, Yaoundé, 2-6 octobre.
- UNICEF (1997), Education et travail des enfants, Document d'information, Oslo, Juin.
- UNICEF (2000), End decade Data Base: Child work, Web address: http://www.childinfo.org/eddb/work/index.htm.
- UNICEF/MINASCOF (1993), Stratégie de survie de l'enfant dans la rue, Yaoundé

Iskorištavanje dječjeg rada u Yaoundéu – Kamerunu: poučeni iskustvima iz provedene ankete djece

Roger Tsafack Nanfosso¹ i Simon A. Song Ntamack²

Sažetak

Iako se problem iskorištavanja dječjeg rada proučava diljem svijeta, malobrojne su studije koje se bave tim problemom u Kamerunu. Cilj ovog članka je popuniti prazninu istraživanjem ove pojave u glavnom gradu — YAOUNDĖ. Istraživanje fenomena dječjeg rada prvenstveno se temeljio na: (i) upitniku koji je isključivo bio usredotočen na problem dječjeg rada, i (ii) na ispitivanju djece-radnika kao glavnim sudionicima u istraživanju. Ovo je jedinstven primjer, jer odrasli (roditelji, skrbnici, poslodavci i sl.) nisu bili uključeni u istraživanje, budući da su u prethodnim istraživanjima iskorištavanja dječjeg rada, ispitanici bili odrasli koji su u ime djece popunjavali upitnike. U usporedbi s primjenom standardnog Logit modela o određivanju dječjeg rada čiji rezultati su općepoznati, primjena drugih modela rezultira ili nepoznatim ili gotovo beznačajnim činjenicama, što navodi na sumnju o ispravnosti prikupljanja podataka.

JEL: C25, D13, O12

Ključne riječi: dječji rad, Logit regresija, siromaštvo, ljudski kapital

Redoviti profesor na Ekonomskom fakultetu Sveučilišta Yaoundé II, Kamerun. P.O Box 6886 Yaoundé -Cameroon. Znanstveni interes: Mikroekonomija s velikim naglaskom na Ekonomici rada. Tel: (237) 223 73 89, Fax: (237) 223 79 12, E-mail: rtsafack@hotmail.com. Osobna web stranica: http://www.cm.refer.org/faseguy

² Asistent na Ekonomskom fakultetu Sveučilišta Yaoundé II, Kamerun. P.O Box 25068 Yaoundé -Cameroon. Znanstveni interes: Ekonomika rada. Tel: (237) 999 13 50, Fax: (237) 223 79 12, E-mail:songntamack@yahoo.fr.