

Child Labour versus Human Capital: The Ugly Face of Face Value

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Abstract: *This study on Child Labour versus Human Capital: The Ugly Face of Face Value is out to investigate the effect of child labour on educational attainment in Cameroon. It looks at the child labourer via a vis education, taking into cognisance the fact that non-schooling could be a cause as well as a consequence of child labour. When the parent sends the child out to work he sees just the wage that the child labourer brings home forgetting the forgone alternative of schooling and the expected returns of education. This study makes use of the Cameroon household Consumption survey data (ECAM IV) collected by the National Institute of Statistics in Cameroon in 2014. The Fourth Cameroon Household Survey (ECAM IV) is a national operation on data collection, processing and analysis which is carried out by the National Institute of Statistics (NIS). In order to achieve our objective, we specify a multinomial logit model since the dependent variable (educational attainment) is a categorical variable. The results of our findings revealed that child labour has a significant negative impact on educational attainment.*

Keywords: Child Labour, Educational Attainment, Human Capital

1. Introduction

It is an interesting paradox about human existence that poor households send out their children to work for sustainability while jeopardising the comfortable future of families. When we talk of 'Child labour', it is not children performing small tasks around the house, nor is it children participating in work appropriate to their level of development, which allows them to acquire practical skills and cultivate the spirit of responsibility. NO! It is about exploitation of the most vulnerable, disadvantaged and marginalised in the society. Child labour is work which negatively surpasses national and international standards concerning the work of children. Child labour is work done by children from 4-17 years that destroys the child in one way or the other, work which is synonymous to exploitation, which is considered as the worst form of child abuse and which gives little or no remuneration and takes away the dignity of the person concerned, both intrinsically and extrinsically. What we are talking about here is hazardous and bonded work not work like cleaning of plates in the house, cleaning the house, washing dresses, that can be beneficial to the physical and mental development of the child, because these activities serve as education to the child and do not impede the child from enjoying its fundamental rights.

The causes of child labour are local, but the main cause of child labour is linked to household poverty. Other factors may be, the failure of the schooling system, gender problems, level of educational attainment of parents, the size of the household, the rank of the child in the family, customs and traditions, unemployment or under-employment of older educated siblings, etc, (Ndjanyou & Djenouassi, 2014). However, looking at the scenario above, household poverty stands out as the main determinant of child labour as the other factors are relatively weak and insufficient. Poverty leaves the parents with no option but to send the children out to work irrespective of their age. In doing this they do not

realise that they are looking at the ugly face of face value. They concentrate on the survival instincts, not seeing the better returns that education will bring in future.

It is thanks to the intervention of trade unions that the age limit for employment has been increased by ILO, (Education International, 2013). A close appraisal of the most common forms of child labour in Cameroon, following distribution by field of activities reveals that 74.8% work in the primary sector, 9% in the industrial sector, 7.9% in trade and 8.5% in services. Most of the children work in the informal sector, doing work like nannies, house helps, servants in restaurants, hocking on the streets, working in quarry sites, working on cocoa farms and other types of farms where they are exposed to pests, deceases, rape, sexual abuse, hunger, and general maltreatment, (ILO, 2010a). This has a devastating effect on the child's health and mental balance. Some are in bondage doing bonded work because their parents owe one thing or another to a creditor. Others are taken by family members under the pretext of helping the child learn a trade, (Ike & Twumasi-Ankrah, 1999). Others get there by being trafficked and are obliged to prostitute and abuse drug. The informal sector accommodates about 99.7% of working children, with 74.5% in the agricultural informal sector and 25.2% in the non-agricultural informal sector (Cameroon National Institute of Statistics, 2010). Child labour is rampant in Africa because in the past it was considered an apprenticeship for a better efficiency in the working life of the individual and a better way of integration in the society, (Grottaert, 1998).

There exists a negative relationship between child labour and educational attainment. Research shows that child labour in rural areas was light so much so that the children could work three hours a day and also school, when they have proper schools. This is another side of child labour which examines children who work and school at the same time. On the other hand, Understanding Children's Work,

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(UCW, 2012) holds that much data concerning child labour is unavailable considering the fact that most of the activities are not reported. Notwithstanding, data alone cannot capture the suffering, fear and loss of human potentials that come with child labour. It goes beyond school attendance because they receive lower wages as adults. Child labour is one of the most powerful engines transmitting poverty across generations, (Gordon Brown, 2012). Top among the undesirable effects mentioned is the fact that child labour deprives its victims of schooling. They do not acquire the needed resources to enable them participate in the labour force. Many children work because education is unaffordable, inaccessible or even seen by some parents as irrelevant to the children. Moeling, (1998) concluded that Structural changes of economic development and growth were more effective than legislative laws.

Within the Cameroonian context, UNICEF analysis from the 2001 data shows that too many Cameroonian children cannot school so they obviously work in the formal and non-formal sectors, with 56% of children severely deprived of shelter. This data shows that 88% of children in Cameroon fall in the poorest quantiles, 77% of children in the poorer quantile and 38% in the poor quantile respectively. Other more recent findings on Cameroon, as reported by Ngouafo Lambert on euronews on the 05/11/2018, say that the sight of children working in mining sites in the Betare Oya district of the Eastern Region of Cameroon is growing and that statistics remain non-existent, but the local council estimates over a thousand children under the age of 18 years work tirelessly in these sites. This supports the assertion that child labour data always under-estimates the real situation since most of the activities are illegal and fall within the framework of the black market.

With regard to schooling or education in Cameroon, the percentage of the ten to seventeen age group of children in full time schooling is only 80.4%. At the national level, the percentage of schooling for boys and girls is 8.4% in favour of boys. The percentage of children who school full-time is relatively lower in rural areas (76.4%). These percentages are a cause for concern since employment in Cameroon is by certificates obtained at the end of a learning session. The percentage of literate working adults drops in urban centres by 12% and by 4% at the national level (Ndjanyou and Djenouassi, 2014).

Human capital and education in particular is investment and as such has cost and a rate of return associated with it. Education is a process of learning, acquiring and transferring knowledge, training, skills, and ideas. Education continues to yield high returns to individuals, the higher they go. Basic literacy and numeracy skills generate excellent returns in labour markets in developing economies. The scale of these returns depends on the context and the country's level of economic development. Other children work and cannot school, meanwhile, the other set of children who work and school do not have enough time, good health and energy to study and so drop out of school as a result of low learning achievement thereby becoming more vulnerable to child labour. The most vulnerable of child labourers are those who do bonded

labour which is synonymous to slavery. It occurs through indebtedness of the parents: when a parent borrows money or any other commodity and is unable to pay, the child will be forced to work for the creditor in guise of debt recovery. These arrangements most of the times are not documented and do not have specified years of work, or monthly remunerations assigned to the worker. These children work in the mining industry, in homes as domestic servants, go into child prostitution and are used as drug traffickers.

Whereas, education is a key tool in eradicating poverty and achieving sustainable human development, Without education, all other tools employed in this regard are weak and feeble and the individual will find it difficult to participate in the labour market, especially in Cameroon where the most important prerequisite for employment is the diploma obtained at the end of a learning session. Education enhances individual and collective capabilities and brings the society to a higher level of awareness in respect of its opportunities as well as possibilities. This depends on the quality of human capital. This is very true and important, with regard to primary and basic education which is the leeway to higher levels of education. This treasure is instead pushed to the background as parents look just at the immediate wage of the child labourer and not seeing the ugly side of the loss that this brings to the individual and the society at large. Beyond the elementary level, higher educational attainment increases the productivity of the individual and enables the individual to participate in the labour force while earning a comfortable wage. The fruits of education are wide spread because they benefit the society in a micro and macro level. Education builds the intrinsic resources of knowledge and skills and adds competences that enable the learner to use them in problem prevention and solving. Competent acting makes the individual more efficient as he/she does not become a social misfit. With education, the child evolves with its environment, is able to stay healthy and set a goal which helps in building a reputation and enhancing capacity to better participate in the labour force.

1.2 The ugly face of child labour

Child labour for generations has been and is still a widespread problem in the Cameroonian economy. It can be considered a necessary evil and it may not be feasible to ban or abolish it in its entirety. In Cameroon where there is a huge child population and where a large number of people fall below the poverty line, child labour helps sustain livelihood and provides poor and vulnerable households with an alternative source of income.

On the other hand, it is observed to have a serious impact on children's social, psychological, emotional, academic and working life. It deprives children of their freedom of being with friends and exhausts their energy to the point where they become so tired and hence do not spend time on their studies. ILO in 2009 affirms that as a consequence of these effects of child labour, a vicious circle is created where work and education compete. The result is absenteeism, high dropout rates, children falling behind and generally low levels of literacy and educational attainment. As a child cannot get educated, he is deprived of the knowledge and

skill that is required for him to be successful in the later part of his life. When the child does not school he is very vulnerable to child labour. Here non-schooling becomes a cause of child labour. The UN is in line with this assertion when it says compulsory education is able to provide a very competent tool for the eradication of child labour. Though there are many determinants of child labour, ensuring affordable, accessible and relevant education will eliminate or trim down child labour.

On the other hand, non-schooling is equally an effect of child labour. When the household does not attain subsistence with the income of the parent(s), the child is forced to work so as to provide additional income for the cost of living to sustain the family. When the child works, he will not be able to school; especially those who do hazardous work, bonded labour and house chores. The ones who work and school normally do not go far because they drop out of school and concentrate on work, which is usually of low quality due to low learning achievement. They are always tired, mal-fed and unhealthy and so cannot withstand the psychic cost of education. Non-schooling therefore can be a cause as well as an effect of child labour.

2. Literature Review

2.1 Child labour

Since the 1980s, child labour, has been giving rise to a new mobilisation in the world, especially from international institutions, Non-Governmental Organisations and the media at large. In this study, work (like cleaning plates in the house, cleaning the house) that can be beneficial to the physical and mental development of the child is put aside because these activities serve as education to the child and do not abuse the child in any way or impede the child from enjoying its fundamental rights. Child labour here refers to work that destroys the child in one way or the other, work which is synonymous to exploitation, work that is tantamount to slavery which is considered as the worst form of child labour and which gives little or no remuneration, both intrinsically and extrinsically. In this study, child labour refers to those below the age of 17 who perform any economic activity whether for remuneration or not, though the ILO accepts that children between the ages of 14-15 in LDCs can work, the government of Cameroon adopts 18 years as the working age, thus our cut off age of 17 yrs.

An analysis that is based on the occupational status of children distinguishes between children who are full-time workers, children who combine work with school, children who have full-time education with no involvement with the labour market and children of leisure, that is those who do not attend school and are not part of the labour market. The results are that the children who work full-time represent 14.4% of the total population of children between 10 to 17 years. Among them 80% are children who are sent to school, and more than 27% of them, particularly between the ages of 10 to 14 years, devote part of their time to economic activities (NIS, ECAM III, 2007)

Child labour is used to increase house hold income when that of the parents is insufficient for the subsistence of the

house hold. This necessity is pursued forgetting the ugly side of child labour. The causes from other sources are so diverse, following the region, country and political and socio-economic situation in the country, but household poverty remains the underlining cause of child labour. Many reasons have been advanced for its existence in Cameroon. Some being the fact that Cameroon is a developing country, she is a heavily indebted poor country, is situated in Sub-Saharan Africa and is economically weak. This phenomenon is evident from the fact that the lowest percentage of children in full-time education is in the 15 to 17 years' old age bracket. More so, boys are much more bi-active (that is work and school) than the girls. The percentage for boys stands at 29.4% and that of girls stands at 25.7%. The girls who don't work full time constitute 7.4% and the boys 3%. The bi-activity phenomenon is mostly found in the rural areas. It is a common phenomenon in Bafoussam town in the West Region of Cameroon, where it is in fact a tradition. 36% of the rural children attend school and work against 11% of those in the urban areas. Agricultural incomes as a matter of fact, do not allow farmers to offer their children leisure time. The situation is further aggravated by the non-existence of farm to market roads and the fact that there are little or no social amenities in these areas. As a result, the children are forced to work in order to contribute to the cost of their education, (ECAM III, 2007).

According to the Cameroon National Institute of Statistics (2012), the northern regions were identified as the poorest regions; they have the lowest percentage of children in full-time education. The percentage ranges from 65.3% to 61.9% and the highest child occupation rates are 75% for the Far North and 50% for the North. The gap of schooling between girls and boys is much more pronounced in these regions, with only one girl out of every four girls registered in the school system. ILO estimates a 23.7% of child labour rate in 2000, while the NIS (2008) estimates the rate at 41%, with 51.3% and 61.9% in rural areas. In 2010 the rate was estimated at 31% according to the 2010 UNICEF statistics.

2.2 Educational attainment

Etymologically, the word "education" is a derivative of the Latin verb "educare" meaning 'to bring up', 'to lead out', 'to raise up', 'to inform', 'to teach' and 'to train'. In its original sense, to educate means acting in order to lead out fully all the potentialities of an individual. Education is therefore a process of learning, acquiring and transferring knowledge, training, skills, and ideas. According to the International Standard Classification of Education (ISCED, 1976), educational attainment refers to the highest level of schooling that an individual can attain in completion of studies. The attainment of education is classified under six categories, which are, none formal education, incomplete primary education, complete primary education, first cycle of secondary education, second cycle of secondary education and tertiary education. Also the Organisation of Economic Co-operation and Development (OECD), defines educational attainment as, the highest complete level of education that an individual can attain. Here educational attainment is divided under four sub-headings, below upper

secondary education, upper secondary education, non-university tertiary education and university-level education.

According to the enrolment statistics by UNESCO, 72 million children of primary school age were out of school in 2005 (United Nations 2007). A study by UNESCO and UNICEF show that the number of children out of school is even higher once data on attendance is considered in addition to official enrolment statistics (UNESCO Institute for Statistics 2005). More than two thirds of all children out of school live in Sub-Saharan Africa and South Asia. At the same time, millions of children work instead of attending school. The global report on child labour from the International Labour Organization (2006) states that 218 million children between 5 and 17 years, that is 14 percent of children in that age group, were engaged in child labour in 2004. 126 million of these children were engaged in hazardous work that endangers the child's safety, health, and moral development, (UNICEF, 2008).

The benefits of education have been established by numerous studies. A report by the U.S. Department of Labour, (2000) summarises more than 160 studies that show that children, in countries at all levels of development, benefit more over the course of their lifetime if they choose school over work. The benefits of increased education include higher wages as an adult, less dependence on social welfare, increased savings, a reduced crime rate, increased political participation, a lower fertility rate, better health, and a higher life expectancy. At the macroeconomic level, the increased productivity and higher income of educated workers are likely to promote economic growth, as the experience of countries with a well-educated work force has shown. How children allocate their time to school, work, or leisure is influenced by many factors. School attendance with its potential to increase future income may be the more rational choice for parents in the long term but short-term needs for subsistence of the household can compel parents to send their children to the labour market, (Ndjanyou and Djenouassi, 2014), (Ahidjo and Rayner, 2015).

There is the problem of assessing education in Cameroon. Most of the Cameroonian children do not go to school because they cannot get a school. Even those lucky enough to have a school place, struggle to keep to the timetable of the lessons, given that they have to do some work at dawn; it could be waiting to see whether a lorry will arrive to dump its waste, or pick scraps before others get out of bed or crack some concrete stones. Girls who don't go to the landfill sites are instead sent out to hock goods. Moreover, cultural norms dictate that girls must get married, irrespective of their age; they are betrothed at birth, (Ndjanyou and Djenouassi, 2014). Consequently, they are married off at a very young age, which prevents them from completing their primary education. The Cameroon Government is taking steps to make child labour a thing of the past, but it is fighting against what is considered a culturally acceptable and necessary evil, making it extremely difficult to eradicate.

2.3 Theoretical Framework and Empirical Literature

2.3.1 Theoretical Framework

The Human Capital theory is looking at labour market investments, education and training, migration and a search for new jobs. These involve cost and the hope for future well-paid jobs. This investment is known as investment in human capital, that is workers have skills to 'rent out'. Education, training, learning and experience all constitute a stock of productive capital. The value of this productive capital is what it can earn in the labour market. Job search and migration increase the value of this human capital, by increasing its price (wage) received from a given stock of skills. Visible material capital always represents a small fraction of capital as compared to the accumulated knowledge and talents of the population. Under special circumstances, energy and effort in the population reveals itself. Societal wealth includes human and non-human capital. Human capital includes education, on the job training, migration, etc, while non-human capital includes the stock of natural resources, buildings and machinery, etc.

The BASIC MODEL of human capital investment says that like all other investments, human capital has costs and expected returns. The cost here is divided into three categories: (1) out-of-pocket cost or direct expenses, which include tuition fees, expenditure on books and others. (2) Forgone earnings, that is opportunity cost, and (3) psychic losses that occur, that is the pain and trouble of learning, because learning is often difficult and tedious. The expected returns of human capital investment are in the form of higher pay, increase job satisfaction, spread over the life time of labour, greater appreciation of non-marketable activities and interests. These future benefits are not straight forward because they are delayed and cannot be easily summed up. The model assumes that humans are utility maximisers, so they will compare the present value of future earnings with the cost of education and training. In this light, additional education and training will only be done if the present value of future earnings exceeds cost. Weighing the cost and benefits of education, we can see that attendance of school is because people believe they will benefit from it. Some parts of the benefits are short-term, they are like the causes or life style of the learner is consumption good. Those who attend college have a choice between two streams, A, start work early but do not go very high and B, start work late and go very high. That is to say, start work after college or after the university.

Among others is also the Mincer's earning function. He assumes a hypothetical economy in which workers differ only in years of schooling s , age t and length of expenditure.

x = the decision to school

t = age

s = years of schooling

$x = t - s - b$,

b = age at the beginning of school,

Earning function -----1,

can now be given as

$Y = \Phi(s,x) + u$ -----2

U = residual error with zero mean

$\Phi(s,x)$ = functional form that best fits the data assumed positive monotonic in s .

Rosenzweig, in his 1977 work affirms that, $\Phi(s,x)$ may be interpreted as hedonic price function, reflecting equations in the demand and supply of labour at each level of schooling and experience. Meanwhile, Willis, in his 1986 work reports that if y , at any level of s is independent of experience level, then function 1 can be written as;

$$Y = f(s), g(x) + u \text{-----} 3$$

$$V(s) = f(s)e^{-\int_0^s g(x)e^{-rt} + dt \text{-----} 4$$

The expected marginal rate of return on education ($P(s)$) is given by, $\dot{P}(s) = \Phi_s(s,x)$

The accumulation of Human Capital is achieved by educational attainment, therefore an investment that is beneficial to the individual and society at large. It has micro and macro consequences, for both parties.

In a simpler form, **The Luxury Substitution Model or Poverty Model** is based on two assumptions: (i) that parents or a household with sufficiently high income will not send children to work. This assumption is poverty driven. At very low income levels, the household regards children schooling and leisure as luxuries that they cannot afford. Thus when incomes of households reach a certain non-critical level, children will be withdrawn from the labour market. The implication here is that children from high income families are less likely to become child labourers. (ii) The substitution axiom states that adult and children labour are substitutes. If adult wage is w_a and child wage is w_c , then this axiom predicts that: if $w_a \geq w_c$, firms will substitute child labour for adult labour in order to reduce cost of production. If $w_a = w_c$, then firms will prefer adults because of their stamina and their productivity. Here, note should be taken that in the literature, there are evidence that children are not as productive as adults, which is a fact because productivity is increased by education and training, the machinery used, job satisfaction and skills gotten from human resource investment, all of which the children do not have. Adults can do all what children can do and even more and not the reverse (Basu and Van, 1998)

2.3.2 Empirical Literature

2.3.2.1 Child Labour and Educational Attainment

A study conducted by Beegle et al (2005) using panel data from two rounds of the Vietnam LSMS, verified the relationship between child labour and educational attainment. They estimate the impact of working between the ages of 7 and 15 while attending school in the first round of the survey on educational attainment 5 years later. The problem of omitted relevant unobservable variables is controlled by instrumenting for child labour, as well as using fixed effects estimation. They find out that child labour has a significant negative impact on educational attainment 5 years later, (Beegle et al, 2005).

Krutikova, in 2006, wrote on child labour and educational attainment, using data from the Kagera Health and Development Survey (KHDS) conducted by the World Bank, Muhimbili University College of Health Sciences (MUCHS) and University of Dar es Salaam. A panel Living Standards Measurement Survey (LSMS) conducted in Kagera region in the North West of Tanzania between 1991

and 2004. Her results, from the OLS method indicate that a one-hour increase in mean hours worked per week is associated with a 3 percent reduction in the final educational attainment. In other words, a one standard deviation increase in child labour is associated with a 35 percent fall in final educational attainment. This association is highly statistically significant and suggests that a child working over roughly 30 hours a week would be unable to attend school at all, (KrutikovaSofya, 2000).

PanosMavrokonstantis of St Cross College, Oxford in June 2011, wrote on "The Impact of Child Labour on Educational Attainment: Evidence from Vietnam". This study investigates the impact of child labour on educational attainment over a three-year horizon. The data used in this paper comes from Young Lives, a longitudinal study investigating the changing nature of childhood poverty in Ethiopia, India, Peru and Vietnam over 15 years. Employing an instrumental variables strategy, Panos examines the impact of working at age 12 on mathematics test scores three years later for children in Vietnam. He used the OLS and controlled ability by using PPVT scores. In the rural area, a one second increase in hours worked reduces maths scores by 4.86 points (out of 100). However, introducing controls for socio-economic characteristics and village fixed effects greatly reduces this effect to just 0.17 points and renders hours worked statistically insignificant at the 10% level. In rural areas the evidence suggests that the impact of child labour is negligible. In urban areas, however, there is causal evidence that child labour significantly impedes educational attainment; a one standard deviation increase in hours worked reduces mathematics test scores by 12.45 points out of 100, or 67.85% of one standard deviation of the test score.

RaynerTabetando and Paul Ahidjo (2015) wrote on "Early Child Bearing and Educational Attainment: Evidence from Cameroon". Their study makes use of two rounds of a national representative household survey conducted in Cameroon by the Demographic and Health Survey Program (DHS), 2004, conducted from the months of February to August 2004. The survey covered 10,462 households, 10,656 women aged 15-49 as well as men aged 15-59. The 2011 wave of the DHS in Cameroon spanned from January to August 2011. After pooling and cleaning the data they have a sample size of 26,082 observations. 10,336 teenage mothers are identified. They use econometric methods like the OLS and matching estimations based on covariates and propensity score and equally implement an Oaxaca-Blinder decomposition of the impact of early child bearing on schooling. This study reveals that teenage motherhood leads to 0.5 to 3.5 years of reduction in schooling of teenage mothers. 40 per cent of the reduction in schooling stems from discriminatory practices and stigma.

TiwangGildas and Ibrahim Manu, (2015), assess the impact of agribusiness labour on the child education in Cameroon. Their main objective is to assess the involvement of child labour in agribusinesses as well as the schooling pattern of children involved in these agribusinesses in Cameroon. The population of this study is made up of 51,190 individuals of both sexes taken from Cameroon National Household Survey (CHS 3) cross-sectional dataset produced by the

National Institute of Statistics, (NIS, 2007). The sample drawn from this population constitutes individuals of age 5-17 years old, making a total of 17,550 children. The conclusion here is that children who work in agribusiness do not go far with education; they mostly end at primary school level when they can handle work and schooling.

3. Methodology

3.1 Sources of Data

The study uses Cameroon household Consumption survey data (ECAM IV) collected by the National Institute of Statistics in Cameroon in 2014. The Fourth Cameroon Household Survey (ECAM 4) is a national operation on data collection, processing and analysis which is carried out by the National Institute of Statistics (NIS). It is the fourth of its kind to be undertaken in Cameroon after those of 1996, 2001 and 2007. It is part of the process to update the poverty profile, the monitoring and evaluation of the national strategy for growth and employment and the progress towards achieving the Millennium Development Goals (MDG).

3.2 Model Specification

Prior to testing the hypotheses proper, the study postulates endogeneity of child labour and therefore specifies reduced form estimates of determinants of child labour as follows:

$$CHL_i = \alpha_0 + \alpha_1RURAL_i + \alpha_2AGEFIRST_i + \alpha_3AGESTOP_i + \alpha_4PUBSCHOOL_i + \alpha_5FEMALE_i + \alpha_6RELIGION_i + \alpha_7EDUC + \varepsilon_i \dots \dots \dots (1)$$

Where CHL is child labour measured by q binary variable which is 1 if the individual got his first job between 5 and 17 years old and 0 if otherwise.

nsc_chl represents coping or imitation is an instrumental variable

RURAL is rural residence captured by a binary variable
 AGEFIRST is the age at first registration in school
 AGESTOP is the age at which he or she drop out of school
 PUBSCHOOL is public school which is a binary variable
 FEMALE is female gender which is a binary variable
 EDUC is education as a cause and an effect of child labour
 RELIGION is a set of three religious affiliations (Catholic, Protestant and Muslim) all measured as binary variables.
 The Linear Probability Model (LPM) is used to estimate the parameters of the model which is simply the application of an OLS estimation technique to a binary dependent variable.

3.3 The Effect of Child Labour on Educational Attainment

The objective of this work is to examine the relationship of child labour on educational attainment. This relationship could be a cause-effect relationship, giving causality. In order to achieve this objective, we specify a multinomial logit model, since the dependent variable (educational attainment) is a categorical variable.

$$EDUCA_i = \beta_0 + \beta_1CHL_i + \sum \alpha_i X_i + \mu_i \dots \dots \dots (2)$$

Where EDUCA is educational attainment measured as a categorical variable (base category = no education, category

1 = primary education, category 2 = secondary education, category 3 = higher education). CHL is child labour while X_i is a set of other covariates (control variables) including zone of residence, sex, age, age squared, household size and religion.

3.3.1 Descriptive Analysis

As a preliminary to the estimations proper, the study performs some descriptive analysis. Table 1.1 provides a summary of descriptive statistics of the variables used in the study for the total sample.

Table 1.1: Summary of Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Noedu	46560	0.2474442	.4315316	0	1
Pedu	46560	0.362994	.4808683	0	1
Sedu	46560	0.285567	.4516889	0	1
Hedu	46560	0.0485395	.2149056	0	1
Primary	46560	0.174957	.3799344	0	1
Industry	46560	0.0635309	.2439181	0	1
Commerce	46560	0.0685997	.2527748	0	1
Service	46560	0.1012887	.3017138	0	1
Lnwage	7427	11.20036	1.848427	1.098612	23.02585
Chl	46560	0.3397981	.4736456	0	1
Age	46560	22.66559	18.99567	5s	99
Hhsize	46560	6.773819	3.987106	1	50
Muslim	46560	0.2339991	.4233762	0	1
Catholic	46560	0.3721864	.4833929	0	1
Protestant	46560	0.2534149	.4349711	0	1
Noreligion	46560	0.0295103	.1692338	0	1
Public	46560	0.0297895	.170008	0	1
Private	46560	0.3787371	.4850777	0	1
Lfp	46560	0.4085266	.4915667	0	1
Selfempl	46560	0.2258806	.4181654	0	1
Permanent	46560	0.3217354	.4671471	0	1
Male	46560	0.4890249	.4998849	0	1
Female	46560	0.5108462	.4998877	0	1
Rural	46560	0.4999356	.5000054	0	1
Urban	46560	0.5000644	.5000054	0	1
Single	46560	0.3524699	.4777445	0	1
Married	46560	0.2841065	.4509927	0	1
Training	46560	0.2205971	.4146537	0	1
Formal	46560	0.0499356	.2178142	0	1
Informal	46560	0.3585911	.479592	0	1

Source: Computed by the author

Results from the summary of descriptive statistics on table 4.1 indicate that on the average, 24.74% of the sample had no education, 36.30% had a primary level, 28.56% had attained secondary school level while 4.85% had attained tertiary education level. The results indicate increasing attainment of education between no education and primary school (28.5%-36.3%), but a drop in school attendance from primary school to tertiary level. This trend may indicate either a high drop-out rate or a high repetition rate. It could also be indicative of an increasing cost of education in Cameroon or a combination of all three factors. In addition the economic and political crises that have engulfed Cameroon for the past two decades could have caused several students to seek informal employment in order to meet up with dwindling incomes caused by these crises. These results will also have consequences in the different models specified in this study. Further results reveal that 17.50% of the sample size was engaged in the primary sector of the economy as against 6.35% in the industrial

sector, 6.86% in the commerce sector and 10.13% in the service sector. These figures are characteristics of the Cameroonian economy as well as many developing economies with a predominant agricultural sector. Also the industrial, commercial and service sectors need specific skills that should be trained, nurtured and educated. In terms of public versus private sector labour force participation, 2.98% of the sample was engaged into public sector as against 37.87% in the private sector. The average age of respondents was estimated at 23 years old. 33.98% of the sample was made up of individuals who have been child labourers. The average household has about seven members. The number of observations for wages was less than the others because many of the individuals especially of the private sector and self-employed did not fill the section for wages.

In terms of religion, 2.95% of the sample claimed to belong to no faith, 37.22% were catholic faithful, 25.34% Protestants and 23.40% Muslim. These figures are also in accordance with the national distribution of religious affiliations nationwide. 35.25% of the sample was made up of single as opposed to 28.41% individuals who were married or living with a partner and the rest are made up of separated, widowed or divorced men and women 4.99% of the sample worked in the formal sector while 35.86% belong to the informal sector. Furthermore, 22.59% of sample was constituted of self-employed workers while 32.17% were permanent workers. 22.06% of the sampled claimed to have received technical and professional training.

3.3.2 The Determinants of Child Labour

The relationship between child labour and educational attainment could be bidirectional thereby requiring a simultaneous analysis (i.e, the problem of endogeneity). Some of the variables are binary requiring the use of multinomial logit or probit analysis. To do this we specify and test the reduced form of the determinants of child labour which allows us to predict the residuals to be used in the other models. We employ instrumental variables (IV) to generate and test the significance of residuals of the simple models and IV models, so as to determine which model is to be interpreted. The instrumental variables here are, agefirst, pubschool, agestop and ncs_chl, (that is ncs_chl stands for the social norm of imitation as explained by Duesenburry) individuals in society tend to do what others do and believe in as right. If many people send their children to work, the tendency is that even those who can afford schooling for their children will also send their children to work. The results of the determinants of child labour are presented in table 1.2 below.

Table 1.2: Reduced form estimates of the determinants of child labour

DV: chl	Coef.	Std. Err.	t	P>t
nsc_chl	0.0159089***	.0006766	23.51	0.000
Agefirst	-0.0005347	.0008554	-0.63	0.532
Pubschool	-0.2416981***	.0815642	-2.96	0.003
Agestop	-0.0014597*	.0008673	-1.68	0.092
Peduc	0.0672711**	.1663248	0.40	0.686
Seduc	0.0472674*	.1669213	0.28	0.777
Heduc	-0.0139007	.1799267	-0.08	0.938
Rural	-0.097098***	.0190793	-5.09	0.000
Age	0.0975462***	.0190638	5.12	0.000

age2	-0.0025428***	.0005051	-5.03	0.000
Catholic	0.0163489	.0264081	0.62	0.536
Protestant	0.0481256*	.0275577	1.75	0.081
Muslim	-0.0787447***	.0272334	-2.89	0.004
Female	-0.0682234***	.0164846	-4.14	0.000
_cons	-0.5981403***	.2107515	-2.84	0.005

Note: *** p<0.01, ** p<0.05, * p<0.1

Source: Computed by the author

In order to investigate the determinants of child labour and thus to examine the effect of education on child labour, the Linear Probability Model is used and the results on the table above are interpreted below. Imitation (nsc_chl), is positive (0.0159089) and significant at 1%. This indicates that the likelihood of the social norm of people copying from their neighbours is high and evident. The more others see children work and school, the more they send their own children to school and work. On the other hand when people see that many others do not send their children to school but to work they will do same and feel they are correct. According to customs and traditions in Cameroon and supported by the American economist James Duesenberry a Neo-Keynesian economist,(1949), individuals in society tend to do what others do and believe in as right. So as said before many others will likely make their children school and work so as to feel comfortable and belong like others.

On the contrary, the coefficient of age at first school registration is negative (-0.0005347) meaning that the higher the age at first registration the less likely is the child to engage in child labour. However, this outcome is statistically insignificant.

Attending a public school is advantageous for the child since the coefficient of public school is negative (-0.2416981). In other words, people from public schools are less likely to be child labourers. Moreover, this result is significant at 1% level. Thus, public school students are significantly less likely to engage in child labour. This can be explained by the fact that public schools in Cameroon are free of charge at the primary level and relatively cheaper at the secondary level.

Also, the coefficient of age at school stop or drop out is negative (-0.0014597) and statistically significant at 10%, meaning that when the child stops schooling early, the more likely it isto engage in child labour.

The LPM results also reveal that there is a positive relationship between level of education and child labour, i.e child labour has a negative impact on the level of education. The coefficient of primary education was found to be positive indicating that there is a probability that individuals at the primary education level are more likely to be child labourers. This outcome is significant at 5%. As they move from one level to the other the chances of becoming a child labourer decreases, (probably because of increase pressure from study and work, many perform poorly and so spend more years in school or drop out). However the chances of becoming a child labourer at the secondary education level slightly decrease given that the coefficient of secondary education (0.047) is positive and significant at 10% level.

A close observation of the marginal effect of all three educational levels included in the model indicate that as the level of education increases, the probability in favour of child labour decreases as well as the level of significance which implies that individuals with primary level of education are more likely to be child labourer than those with secondary or higher education. This result is according to a priori expectation and corroborates Tazeen (2008) who found out that education reduces the likelihood of becoming a child labourer. However, this outcome does not tie with the findings of Ravallion and Wodon (2000) who concluded that child labour does not necessarily arise at the expense of schooling. The above results illustrate the fact that child labour cuts across the first two levels of education simply because most of the children involved in it do so in order to provide or supplement parental incomes which are limited in taking care of expenses related to their education. At the tertiary level of education the students are gone pass the age of child labour and this is indicated by the negative sign.

Results from the LPM indicate that the coefficient of rural zone of residence is positive (0.097) which implies that children in the rural areas are more likely to be involved in child labour. This result is significant at 1% level. The rural area is more agricultural based, and the residents are relatively poorer than residents in the urban areas in Cameroon. As such children in the rural area are more likely to get involved in child labour in order to contribute to the family income. This situation is further aggravated by the lack of basic facilities in this area like farm to market roads, portable water and electricity.

The religious variable which is used to represent cultural norms provides mixed results. While being a Muslim reduces the likelihood of being a child labourer, being a Catholic or Protestant increases it. Though this result contradicts our a priori expectation, it can be explained by the fact that it is quite difficult to find Muslims in general working in paid jobs. In effect, they usually focus more in the family business which in most cases is concerned with livestock for the boys and household chores and baby-sitting for the girls. It therefore makes it difficult to have a clear cut distinction and statistics on child labour in this religious community.

Age has a positive and significant coefficient meaning that as age increases the individual becomes more likely to increase its educational attainment and less likely to be a child labourer. On the other hand Age² is negative indicating the diminishing returns on learning and labour productivity as the individual becomes older. This is supported by the human capital theory and the labour productivity theory.

The coefficient of female gender is negative (-0.0682234) which implies that women are less likely to be engaged in child labour as opposed to their male counterparts. This result is contrary to our priori expectation and also contradicts the finding of Canagarajah and Coulombe (1997) that child labour incidence is significantly more prevalent among females than males. According to these authors, male children are more likely to go to school compared to females in Ghana. This result can be justify by the fact that girls are mostly engage in activities that are not documented or paid such as house chores, babysitting, hocking, bonding and other hazardous non-paid activities as opposed to male children who are mostly exposed to paid activities out of the home. Also educating girls in Cameroon is looked upon as a waste since she will get married and take the proceeds of education to another family.

3.3.3 The Effects of Child Labour on Educational Attainment

The objective of this study is to examine the effects of child labour on educational attainment. To achieve this we employ the multinomial logit analysis which has been adequately. To determine whether child labour is endogenous in our model we specified and tested the reduced form of the determinants of child labour in section 1.2 (table 1.2) above to generate the residuals. We then made use of the instrumental variables to test the significance of the residuals. Results of the analysis are presented in table 1.3. The results show that the residuals are not significant, indicating that there is no endogeneity so our interpretations are based on the simple multinomial logit equation.

It should be noted that child labour is bad and therefore not encouraged in the society. It therefore stands that the coefficient of child labour in relation to educational attainment should be interpreted with care. A positive coefficient implies hindrance to educational attainment and vice versa.

Table 1.3: The Effect of Child Labour on Educational Attainment

Variables	(Simple multinomial logit)			(IV-Multinomial logit)		
	Primary	Secondary	Higher	Primary	Secondary	Higher
Chl	0.191***	0.0935***	-0.231***	1.762	1.641	1.440
	(0.0327)	(0.0362)	(0.0562)	(1.184)	(1.185)	(1.225)
Rural	-0.433***	-1.277***	-2.401***	-0.322	-0.302	-2.564*
	(0.0270)	(0.0321)	(0.0664)	(1.026)	(1.035)	(1.321)
Age	0.107***	0.303***	0.474***	1.071***	2.111***	3.829**
	(0.00261)	(0.00381)	(0.00982)	(0.275)	(0.322)	(1.705)
age2	-0.00157***	-0.00447***	-0.00665***	-0.0275***	-0.0485***	-0.0820**
	(3.63e-05)	(5.91e-05)	(0.000147)	(0.00775)	(0.00867)	(0.0391)
Hhsize	-0.000290	-0.00819**	-0.0922***	-0.0682	-0.0789	-0.119
	(0.00320)	(0.00394)	(0.00841)	(0.0908)	(0.0909)	(0.102)
Catholic	0.316***	0.628***	0.686***	-2.386	-2.030	-2.126
	(0.0411)	(0.0484)	(0.0806)	(1.470)	(1.475)	(1.537)
protestant	0.382***	0.577***	0.559***	13.10	13.45	13.06
	(0.0431)	(0.0511)	(0.0868)	(1.064)	(1.064)	(1.064)

Muslim	-0.692***	-1.415***	-2.262***	1.284	0.0899	-1.899
	(0.0413)	(0.0527)	(0.112)	(1.763)	(1.774)	(2.002)
Female	-0.358***	-0.645***	-1.065***	-0.00935	-0.652	-0.654
	(0.0261)	(0.0311)	(0.0534)	(1.050)	(1.054)	(1.120)
residualchl				4.259	-1.791	-3.089
				(3.996)	(4.153)	(5.371)
Constant	-0.0992*	-2.121***	-5.598***	-5.136**	-13.93***	-37.09**
	(0.0518)	(0.0679)	(0.175)	(2.226)	(2.887)	(18.70)
Observations	43,978	43,978	43,978	3,030	3,030	3,030

Note: Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Source: Computed by the author

Results from the simple multinomial logit reveal that the coefficients of child labour in the primary education level and secondary level are positive whereas the coefficient becomes negative in the higher level. This shows that while child labour is a hindrance to primary and secondary educational attainment, it is not at higher level. These results conform with our a priori expectation and confirm the finding of Krutikova (2006) who found a highly negative and significant association between child labour and schooling in Tanzania. The coefficients indicate that a one point increase in child labour is likely to reduce primary school attendance by 0.191 and secondary education by 0.0935, while increasing higher educational attainment by 0.231; i.e increase in the educational level reduces the likelihood of becoming a child labourer until it becomes negative at the tertiary level. From these coefficients it can be inferred that the likely effect of child labour on educational attainment reduces with the level of education especially with primary and secondary education. This finding is understandable as educational attainment reduces with increases in age. So at the tertiary level most students are above the cut off age of child labour which is placed at 17yrs in this study. Our results further confirm the finding of Patrinos and Psacharopoulos (1997) in their study using Peruvian dataset which shows that child labour is damaging to education.

The coefficient of rural area of residence is negative across all the levels of education which means that being resident in the rural area reduces the probability of attaining primary, secondary and tertiary levels of education. These results are in line with the assertion of United Nations Rwanda (2011) which reported that the negative impacts of child labour on education in Rwanda is more likely in rural areas.

As age increases the likelihood of attaining primary, secondary and tertiary education levels also increase. The human capital theory postulates that as age increases the ability of learning and productivity also increase with age up to a certain level and then declines, (Psacharopoulos, 1997, Krutikova, 2006). This can also be explained by the fact that when Cameroonians get older they begin to see the need for education and are exposed to evening classes and structures like The Pan African Institute for Development West Africa, (PAID-WA) which organises classes after working hours for professional certificates. Once again, these results are all significant at 1% level which makes the variable paramount in designing policy towards educational attainment in Cameroon.

Looking at the of zone of residence, the results indicate that the negative effects of child labour on educational attainment is more visible in rural areas than urban centres as rural child labourers were significantly less likely to attain secondary school.

The coefficient of household size (hhsz) is negative across all levels of education indicating that it reduces the likelihood of attaining any level of education. However the significance varies with the level of education. While it is not significant at the primary school level, it is significant at the secondary education level at 5% and at the higher education level at 1%. These results which are in conformity with our a priori expectation are not surprising. Theoretically large households need to spread their economic resources among all members of the school attending age which may not be available for all to go to school (resource widening). On the contrary small households have fewer members on whom to spend household resources for education (resource deepening). In the data set, an average household was almost 7members with a maximum of 50 indicating large households in Cameroon. These results tie with those of Galli, 2001, which say that large households compromise the educational attainment of the members.

In addition, results from table 1.3 show that the coefficients of female gender are all negative across all the levels of education. This implies that women are less likely to attain primary, secondary and tertiary education as compared to their male counterparts. The marginal effect increases as the level of educational attainment also increases. This result is significant at 1% level as well. Following religious affiliations, the results indicate that Muslim faith jeopardises the chances of the individual attaining primary secondary or higher education level.

The sample was disaggregated into rural and urban residence in order to carry out the same analyses in these areas of residence. This was meant to either confirm or refute our earlier results and equally to find out the response of educational attainment in the different areas to the different variables. This analysis is necessary to confirm or refute the fact that the urban area is more developed, more attended to in terms of public policies than the rural area in Cameroon. The results of this disaggregated analysis are presented on table 1.4 below.

Table 1.4: Results of Rural and Urban Sub Samples

Variables	(rural)	(rural)	(rural)	(urban)	(urban)	(urban)
	Primary	Secondary	Higher	Primary	Secondary	Higher
Chl	0.134*** (0.0403)	-0.0468 (0.0483)	-0.817*** (0.120)	0.470*** (0.0608)	0.453*** (0.0623)	0.205*** (0.0768)
Age	0.0939*** (0.00335)	0.277*** (0.00559)	0.403*** (0.0203)	0.131*** (0.00426)	0.338*** (0.00554)	0.517*** (0.0116)
age2	-0.00145*** (4.67e-05)	-0.00427*** (9.04e-05)	-0.00561*** (0.000301)	-0.00183*** (5.92e-05)	-0.00482*** (8.31e-05)	-0.00718*** (0.000173)
Hhsize	-0.00880** (0.00389)	-0.0177*** (0.00516)	-0.178*** (0.0207)	0.0193*** (0.00580)	0.0129** (0.00651)	-0.0550*** (0.0102)
Catholic	0.505*** (0.0506)	0.920*** (0.0637)	1.339*** (0.183)	-0.0653 (0.0762)	0.152* (0.0829)	0.153 (0.106)
Protestant	0.456*** (0.0509)	0.674*** (0.0648)	0.946*** (0.191)	0.126 (0.0833)	0.291*** (0.0905)	0.229** (0.117)
Muslim	-0.658*** (0.0496)	-1.256*** (0.0715)	-1.330*** (0.249)	-0.931*** (0.0785)	-1.798*** (0.0885)	-2.762*** (0.138)
Female	-0.429*** (0.0336)	-0.870*** (0.0434)	-1.588*** (0.128)	-0.220*** (0.0418)	-0.378*** (0.0464)	-0.774*** (0.0651)
Constant	-0.322*** (0.0603)	-2.871*** (0.0907)	-6.599*** (0.379)	-0.344*** (0.0884)	-2.594*** (0.106)	-6.206*** (0.208)
Observations	21,911	21,911	21,911	22,067	22,067	22,067

Note: Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Source: Computed by the author

Results from the rural and urban sub groups indicate that child labour reduces the likelihood of educational attainment at all levels except for rural secondary and higher education. The results are all significant except for rural secondary. These results are consistent with those of table 1.3 except for higher education. This can be explained by the fact that child labour is minimal in urban areas and the residents are more informed, richer and most of the higher educational institutes are located in urban areas thereby increasing access than to residents in rural areas.

The findings of Age and Age² in earlier analysis are confirmed in the disaggregated results indicating that there is no difference between rural and urban residents with respect to age, educational attainment and functioning in the labour market. School age is streamlined for the entire country irrespective of the area of residence

While household size (hsize) reduces the likelihood of school attendance in all schools in the rural areas and higher education in urban areas, it increases the likelihood of attaining primary and secondary education in the urban areas. The results are slightly different with those of table 1.3 which present a global result without distinction to the area of residence. From this analysis, one is tempted to infer large household in the rural areas as against urban areas. The results on higher educational attainment in urban areas is however surprising given the explanation under table 1.3. It is possible that the data set in the aggregated results could be responsible for this or our specification may not be appropriate for the urban area.

On religious affiliations, the Muslim religion was found to exert a negative effect on the likelihood of attaining primary, secondary and tertiary education in both areas of residence. That is they are less likely to attain primary and secondary education and even to a lesser extent for tertiary education in both areas. For Catholics and Protestants the effect is different. In the urban areas they are more likely to attain primary, secondary and tertiary education than in the rural areas. These results reflect those in table 1.3 above. All are significant at 1%.

The same behaviour is observed with female gender in both areas of residence as the variable consistently and significantly reduces the probability of attaining primary secondary and higher education in the both areas. Women in both the rural and urban settings are less likely to attain any of the levels of educational attainment. These results reflect those on table 1.3 above.

Table 1.5 provides a male versus female sub group analysis results of child labour and educational attainment. We run this sub-group because we want to confirm or refute the results in the main model on table 1.3 above. This analysis is meant to confirm or refute the fact that there is a gender bias in education in Cameroon as Cameroonians prefer educating the boys rather than the girls because they believe that the benefits of girls education will be enjoyed by another household not the one that bore the cost of human capital accumulation.

Table 1.5: Male versus Female Sub Groups Results

Variables	(Male)	(Male)	(Male)	(Female)	(Female)	(Female)
	Primary	Secondary	Higher	Primary	Secondary	Higher
Chl	0.231*** (0.0511)	0.198*** (0.0551)	-0.165** (0.0773)	0.155*** (0.0435)	0.00425 (0.0499)	-0.248*** (0.0861)
Age	0.133*** (0.00407)	0.318*** (0.00546)	0.474*** (0.0121)	0.0929*** (0.00351)	0.309*** (0.00563)	0.554*** (0.0191)
age2	-0.00178***	-0.00436***	-0.00618***	-0.00150***	-0.00492***	-0.00862***

	(5.49e-05)	(8.03e-05)	(0.000173)	(5.03e-05)	(9.21e-05)	(0.000311)
Hhsize	0.0174*** (0.00492)	0.0209*** (0.00578)	-0.0689*** (0.0110)	-0.0121*** (0.00431)	-0.0328*** (0.00567)	-0.114*** (0.0137)
Catholic	0.271*** (0.0617)	0.597*** (0.0717)	0.831*** (0.112)	0.364*** (0.0555)	0.670*** (0.0669)	0.504*** (0.119)
protestant	0.348*** (0.0648)	0.530*** (0.0757)	0.667*** (0.120)	0.433*** (0.0583)	0.653*** (0.0706)	0.452*** (0.129)
Muslim	-0.650*** (0.0618)	-1.241*** (0.0761)	-1.814*** (0.140)	-0.749*** (0.0561)	-1.659*** (0.0755)	-3.110*** (0.212)
Rural	-0.319*** (0.0403)	-1.019*** (0.0468)	-2.032*** (0.0835)	-0.526*** (0.0368)	-1.539*** (0.0452)	-2.956*** (0.118)
Constant	-0.637*** (0.0758)	-2.859*** (0.0980)	-6.384*** (0.227)	-0.0601 (0.0681)	-2.243*** (0.0947)	-6.655*** (0.306)
Observations	21,490	21,490	21,490	22,483	22,483	22,483

Note: Standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Source: Computed by the author

Results from gender sub-groups analysis indicate that child labour decreases the likelihood of primary, secondary educational attainment and to a greater extent the probability of tertiary education significantly for men and women. The coefficient indicates that a one point increase in child labour is likely to reduce primary school attendance in the male gender by 0.231 and in the female gender by 0.155. in the secondary education level one point of child labour will reduce educational attainment in the male by 0.198 and in the female by 0.00425 while increasing higher educational attainment by 0.165 for males and 0.248 for females; i.e being a female increases the chances of not being educated in the primary, secondary and most of all higher education. The results are significant at 1%.

Once again the maximum turning point of age (the inverted U-Shaped analysis) on educational attainment across all levels of education is observed in both the male and female samples. As age increases both male and female gender are likely to increase their educational level. With age the male is more likely to school as the primary school coefficient is 0.133 while that of women is 0.0929, for the secondary school level the male coefficient is 0.318 and the female still lower 0.309 though all are statistically significant, at 1%. It can be inferred from the statistics that the effect of age reduces as the level of education increases and then turns negative. With Age² the coefficients turn negative. This is expected since we are looking out on the inverted U-shape effect on education.

Household size exerts a positive and significant effect on the probability of attaining primary and secondary levels of education for the male. On the other hand the effect is negative and significant on the likelihood of attaining tertiary education. Looking at the female sub sample, results indicate that household size has a negative and significant effect on educational attainment at all levels. These results are significant at 1% level. Being a Catholic or a Protestant increases the probability of primary, secondary and tertiary education in both male and female samples. Contrarily, being a Muslim consistently reduces the probability of primary, secondary and tertiary education significantly.

Living in the rural area significantly compromises the probability of primary, secondary and tertiary education for both male and female. The effect here is that women are

less likely to even attain primary or secondary education than men. The results are significant at 1%.

In a nut shell we reject our prior assumption which says child labour has no effect on educational attainment. This is so because child labour has a negative significant effect on educational attainment. The disaggregation for male and female sub-group show a negative significant effect of child labour on both, though the effect is greater on females, may be because of gender discrimination in Cameroon as explained by the chauvinistic theory of labour supply and norms in Cameroon. Looking at the zone of residence, the negative effect of child labour is felt more in the rural area than in the urban area because the rural area suffers from general poverty in Cameroon. As for religious affiliations, the effect is greater on Muslims than Catholics and Presbyterians, following the non-attachment of Islamism to education especially for the girl child. This disaggregation further confirms the results of the general equation which brings out a negative effect of child labour on educational attainment. These results are in line with the findings of Asamu Festus Femi, 2015 who found that child labour brings about negative effects like illiteracy, low school attendance and enrolment, as well as developmental and performance implications.

4. Major Findings

From the analyses of the various models specified the following results were obtained. Firstly, the various coefficients of child labour on the specified levels of education were positive and significant except for higher education where the coefficient was negative and significant at 1%. In other words, children in employment are significantly less likely to attain primary and secondary school level, but the insignificant few who attain these levels are instead more likely to attain tertiary level of education.

Secondly, results of the covariate variables show that rural residents are less likely to attain tertiary, secondary or even primary education.

Thirdly, educational attainment increases with age up to a certain level and starts declining there by providing the inverted u-shape, which confirms human capital and labour force predictions.

Fourthly, the size of the household compromises educational attainment, with members of large households being more unlikely to attain even low levels of education. Fifthly, cultural wise, Muslims are less likely to attend school and there is a gender bias because female Muslims are more unlikely to attend school as compared to their male counterparts.

5. Conclusion

No parent would want to see their child exploited, let alone endangered, through child labour. The fundamental problem is the choice that the parent is faced with. In most cases parents allow their children to work instead of schooling because poverty does not offer any other choice. However, poverty also goes hand in glove with social norms and attitudes that diminish the future value of education, especially for young girls. From all indications, those involved in child labour are blinded by the immediate benefits derived, without looking at the deep seated pain and enormous loss incurred by individuals and society due to its negative impact on the development of human capital through education. It therefore goes without saying that most often than not, the argument of household poverty is a paradox, as it is only being used to serve as the mask that veils the ugly face of child labour in order to focus on the face value attached to it by its proponents.

The available child labour statistics, greatly under-rate the real situation on ground. This is so because bonded activities, hazardous work and the worst forms of child labour are illegal. Statistics alone can never capture the suffering, trauma, fear and the loss of human dignity and potentials that come with child labour. The effects of child labour go beyond school attendance. The victims receive lower wages as adults, their health suffers when they grow up, restraining them from arriving their full potentials. Child labour is one of the most powerful motors that transmit poverty across generations. Many children work because education is unaffordable, inaccessible or regarded as irrelevant. Taking children away from work and sending them to school can help to reduce poverty and develop skills for work which increases growth. There is no price that can be enough to pay for a lost childhood or for psychological and emotional damage caused by bonded work, hazardous work or the worst forms of child labour. Income levels here are seen as a very minute effect of child labour. The effect of child labour on the individual and the society at large in the short and the long-run especially in developing countries like Cameroon cannot be over emphasised.

6. Policy Recommendations

From the above results the following policy objectives can be suggested:

- Firstly, since we conclude a significant negative effect of child labour on educational attainment in Cameroon, we strongly recommend that added to the free basic education, the government should make it compulsory and add to it social-protection schemes like cash transfer, stipends to vulnerable scholars or basic-income strategy to vulnerable parents.

- Again, the underlying determinants of child labour are mostly local. The state can use multi-national companies to exchange natural resources with education programmes
- The public should be sensitised on the existence of child labour and its negative consequences on Radio and Television, on bill boards, making slogans and organising seminars for parents especially in the rural areas. In fact some propaganda like what is done with the covid-19 pandemic sensitisation. When political leaders are involved, there will be a closure of significant gaps that separate the legislation and enforcement capacity.
- Thirdly, we recommend more of technical and professional training schools which will prepare the individual for the job market. School curriculum be revise with syllabuses tailored to suite the context to which the learner is exposed. These will build specific skills to affront life in general and the job market and will give a second chance to those who have gone past school age.

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