

**Title: Legitimacy of birth and child living arrangement in Cameroon:  
Does out-of-wedlock childbearing affect household structure?**

**Abstract**

The living arrangements of children are critical to their development and wellbeing. This study examines differences in the living arrangements of legitimate and out-of-wedlock children in Cameroon. Analyses are based on 6666 children aged less than 15 years from the 1998 Cameroon Demographic and Health Survey (1998-CDHS). Out-of-wedlock children represent 9% of this sample. Findings conclude that out-of-wedlock childbearing reinforces the dissociation between childbearing and childrearing especially for mothers in union and contributes to the formation of extended family-households. Three reasons could explain these findings: the tendency to out-foster children from former unions to avoid instabilities and conflicts which their presence may cause in present unions; the patrilineal character of African legal systems and traditions, which encourages children to be brought up by their father or his family, and the tendency of young unmarried mothers to rely on their parents or others relatives for socio-economic support in child rearing especially when their child(ren)'s father refuses to accept paternity. More in-depth longitudinal research on the relationship between legitimacy of birth, children's life course, and socioeconomic factors is urgently needed.

**Keywords:** Cameroon, Child living arrangement, Family/household, Legitimacy of birth, Marriage, Out-of-wedlock childbearing.

## Introduction

Marriages, childbearing and family formation in Sub-Saharan Africa are in transformation. In Cameroon, about 25% of reproductive aged women (15-49 years old) have started their motherhood out-of-wedlock. While some studies have suggested that out-of-wedlock childbearing is a strategy to favor or accelerate transition to marriage or recognition of union, 33% of these women who experienced out-of-wedlock childbearing remain never married ten years after their first maternity (Calves, 1999; Emina, 2005).

This paper examines whether the living arrangements of legitimate children and that of children born out-of-wedlock differ in Cameroon, and identifies the factors that account for the difference. In fact, despite a growing concern over the health and socioeconomic consequences of out-of-wedlock childbearing in Sub-Saharan Africa as well as the role of living arrangements<sup>1</sup> as indicator and factor of child welfare, few studies have explored the effect of out-of-wedlock birth on the child living arrangement.

### 1. Legitimacy of birth and child living arrangement in Sub-Saharan Africa: Theoretical considerations

Studies on legitimacy of birth and child living arrangement differ according to the methodology used (reference population, indicators measuring child' living arrangement and out-of-wedlock childbearing). Considering the population under analysis, certain studies are based on adolescent mothers or their children (Ngondo, 1991; Bledsoe and Cohen, 1993), whereas out-of-wedlock childbearing involves adolescent and non-adolescent women due to the increase of age at first marriage among educated women and/or in urban areas. With reference to the dependent variable (child living arrangement), most studies analyzed child fostering (Bledsoe and Cohen, 1993; Vandermeersch, 1999 and 2002) instead of the general pattern of living with parents or the status in household (Ngondo, 1991; Emina, 2000 and 2005). Considering the independent variable, the legitimacy of birth, number of studies used mother's marital status at survey as proxy (Ngondo, 1991; Bledsoe and Cohen, 1993; Vandermeersch, 1999 and 2002) while legitimacy of birth should be measured by mother marital status at child birth (Emina, 2005).

From the above theoretical framework, it emerges that regardless of indicators and population studied, four kinds of perspectives could be used to compare the living arrangements of children born out-of-wedlock and those of legitimate children: *Anthropological, demographic, microeconomic as well as interaction between these perspectives.*

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<sup>1</sup> Indeed, living in a single mother household or non-coresident with biological parents are generally at higher risk of having poor development outcomes such as infant and/or child mortality, lower use of medical service, lower educational enrollment and/or attainment, risk of early premarital sex and out-of-wedlock childbearing (Bledsoe and Gage, 1987; Wu and Martinson, 1993; Emina, 2000).

### *Anthropological and cultural perspectives*

According to these perspectives, the living arrangement of a child born out-of-wedlock depends on father recognition and the affiliations system. Generally, if the father recognizes paternity, the child lives with the father or in the father's family. In the opposite case, the child stays with his/her mother or with his/her sociological father named among his/her mother's family members. For instance, in the Beti-Fang society, an out-of-wedlock child is considered to be the child his/her maternal grandfather except if the biological father pays money for paternity rights. This perspective leads to the first hypothesis which presumes that *the difference of a child's living arrangement according to legitimacy of birth depends on society's attitude on out-of-wedlock childbearing*. Thus, it is suggested that differences child living arrangement between Central/South/East region Beti-Fang region) and other regions in Cameroon are due to the fact that the traditions of Beti-Fang region tolerate out-of-wedlock childbearing. However, the unavailability of information on paternity recognition of out-of-wedlock child in the current data, limit our ability to check this claim.

### *Demographic perspectives*

The demographic approaches assume that couples living together in two parent household are in union, while parents living in single parent households are not in union (union disruption or single parent) except in the case of non-co-residence unions which are rare in most African societies. In addition, only children who live with one remarried parent after former union disruption can reside in step household. These perspectives suggest the second hypothesis: *The likelihood of living in a two parent household is higher among children born in union*. In fact, although in some cases out-of-wedlock childbearing is a strategy to favor or accelerate transition to marriage, overall premarital childbearing has a negative effect on a single mother's chances to get married (Calves, 1999; Emina, 2005).

### *Microeconomic perspective*

Previous studies have found that the likelihood of out-of-wedlock childbearing is higher among adolescents who are more unlikely to be able to support themselves and their children in case of partner absence. This leads to the third hypothesis which presumes that *Children born out-of-wedlock and their single mother are generally lodged in an extended-family household mostly in maternal parents household*. In fact, young unmarried mothers usually rely on their parents or other family member for economic and social support in the absence of male partner (Richter, 1988).

### *Interaction perspective*

This perspective is situated between demographic and microeconomic perspectives as well as considering cultural values. In fact, it is based on mother migration and socio-economic status, mother union history as well as marriage with a man other than a child's biological father, and African tradition on childrearing, which are considered as factors of mother-child non co-residence and children out-fostering (Richter, 1988). This perspective suggests the fourth hypothesis: *The likelihood of being fostered is higher among out-of-wedlock children than among children born in union*. Indeed, like union disruption, out-of-wedlock childbearing is considered as a stressful situation particularly concerning young unmarried mothers. Thus, they often leave their children or send them apart to achieve work, education and/or marriage goals. This situation is reinforced if the child father does not recognize the paternity and by African culture for which a child is not a property of his own parents, but he belongs to his/her parents' lineage (Goody, 1978; Page, 1989).

These different perspectives are not mutually exclusive and suggest that parents' marital status history, parents' survival status as well as parent's or child migration status, and out-of-wedlock child paternity recognition<sup>2</sup> are the main factors which determine child living arrangement. In fact they determine the type of child-parents' residence. However, these factors are influenced by child characteristics, parents' socioeconomics background, and the cultural, social legislation and/or socioeconomic environment (McDaniel and Zulu, 1996; Vandermeersch, 1999 and 2002).

## **2. Variables and Indicators**

### *Child living arrangement: dependent variable*

The concept of living arrangements applies to the status a person (child in this case) has within the household. Living arrangements concern whether individuals are members of a family household or of a non-family household, whether or not they are members of the household. Box 1 provides information on different types of children's living arrangements. It enables the distinction to be made between living with both parents and not living with either parent. For children whose parents live apart, one distinguishes between living with the mother or a father. Finally, when the child lives with a single parent, he/she lives in a step household, a single parent household if that parent is household head, or with a single parent lodged in an extended-family household.

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<sup>2</sup> Paternity recognition depends of ethnic tradition, child sex and father's socioeconomic characteristics such as economic autonomy and age.

<b>BOX 1 – Different states of child living arrangements</b>	
1. Child lives with two biological parents	} Child lives in two parents household
2. Child lives in a maternal step household	
3. Child lives in a paternal step household	
4. Child lives in a single mother household	} Child lives with single mother
5. Child lives with single mother in an extended household	
6. Child lives in a single father household	} Child lives with single father
7. Child lives with single father in an extended household	
<b>8. Fostered child (Child does not live with both biological parents).</b>	
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1. Child lives in an intact household	
2 – 8: Child lives with parents apart	
2 – 7: Child lives with a single biological parent	
3, 6, 7, 8: Child does not live with mother	
2, 4, 5, 8: Child does not live with father.	

#### *Legitimacy of birth: independent variable*

The legitimacy of birth is the exposure variable. It is defined as the status of a child according to the marital status of his/her mother at the time that he/she is born regardless of the mother's current marital status. When the mother is in union<sup>3</sup> (formal or informal) the children are considered legitimate, whereas those born to single mothers are out of wedlock children. This is a demographic definition of legitimacy of birth which is different to juridical and sociological definition. In fact, in most countries and societies, a juridical and sociological father is designated in case of unknown father.

#### *Control variables*

These variables include mother's characteristics<sup>4</sup> (marital status at survey, age, parity, level of education, ethnic group, region of residence, place of residence), household living standard, and child characteristics (age and sex). These factors will be used as controls factors because they are associated with out-of-wedlock childbearing and/or child living arrangements (see Emina, 2005).

<sup>3</sup> In fact, the definition of marriage used by the 1998 Cameroon Demographic and Health Survey depends on respondent self definition of union (traditional union, legal and/or religious as well as living together).

<sup>4</sup> I remove mother parity and ethnic group because mother parity and age are strongly associated. Likewise, mother region of residence and ethnic group are strongly associated. I kept mother's region of residence and age owing to their best Wald Chi-square with reference to dependent and independent variables.

### 3. Data and Methods

Data are from the 1998 Cameroon Demographic and Health Survey (1998-CDHS). The sample encompasses 6666 children under the age of 15 years found in the household survey and identified in the mother fertility survey. Out-of-wedlock children represent 9% of this sample. Analyses are focused on three kinds of variables: independent variable, dependent variable and control variables.

The legitimacy of birth is the independent variable or exposure variable, while child living arrangements is the outcome variable. Control variables include, *Mother's marital status at survey*, *Child characteristics* (sex and age), *Mother characteristics* (age, parity, ethnic group, region of residence, place of residence and education), and *Household living standard*. Table 1 displays the distribution of legitimate and out-of-wedlock children by selected socio-demographic characteristics.

Overall, out-of-wedlock and legitimate children have similar distribution except if one considers mother's age, marital status at the survey, educational level, region of residence, and place of residence. Indeed, nearly 90% of the legitimate children have a mother in union at the time of survey while this proportion accounts for only 45% for out-of-wedlock children. More than half of out-of-wedlock children reside in the Centre/East/South region where the main ethnic group is Bulu-Beti-Fang whose traditions tolerate out-of-wedlock childbearing. By contrast, in the Northern region, out-of-wedlock children represent only 2% compared to 34% for legitimate children. It seems important to specify that the Northern region is mainly occupied by Fulfude and Biu-Mandara whose tradition forbids premarital sex. Marriages are early and this region is the less developed of Cameroon in terms of education and access to health services (Emina, 2005). Islam is the principal religion in this area. With reference to mother's education, 60% of out-of-wedlock children have a most educated mother compared to 25% for legitimate children.

To determine whether the living arrangements<sup>5</sup> of legitimate children and that of children born out-of-wedlock differ in Cameroon, as well as identify the factors that account for the difference, the study uses descriptive and multivariate methods. Descriptive methods encompass comparison of the proportion of legitimate and out-of-wedlock children who live in each type of living arrangements previously described, as well as a chi-square test to determine whether observed differences are significant at 5%. Multivariate methods are founded on two separated mixed multinomial logistic regression models according to mother marital status at the survey. Indeed, the residence in a two parents' household is possible only for children whose mother is in union at the time of survey. According to whether mother is in union or not I first evaluated the crude effect of legitimacy of birth (bivariate level). Finally, I simultaneously controlled for this crude effect by controls variables presented in table 1. This is the net effect of legitimacy of birth. These different effects of legitimacy of birth (crude and net) are presented in tables 3 and 7. Also, it is

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<sup>5</sup> Analyses are limited to living arrangements involving the mother.

important to emphasize the robustness of our model, which does not assume independence between observed children within a household. In fact, one woman could be represented by more than one child.

Table 1 – Repartition of legitimate and out-of-wedlock children aged less than 15 years old in Cameroon by selected socio-demographic characteristics

	Legitimate children	Out-of-wedlock children	All
<i>Child sex</i>			
Male	49.0	49.1	49.0
Female	51.0	50.9	51.0
<i>Child' age</i>			
<3	21.5	20.4	21.4
3-5	21.8	22.5	21.9
6-14	56.7	57.1	56.7
<i>Mother age</i>			
<20	2.4	10.0	3.1
20-29	32.6	59.1	35.0
30-49	65.0	30.9	61.9
<i>Mother's marital status at survey</i>			
Not in union	11.0	54.9	15.1
In union	89.0	45.1	84.9
<i>Region of residence</i>			
Centre, South, East	27.2	49.8	29.3
West, Littoral	22.2	26.0	22.6
Northwest, Southwest	16.5	22.6	17.1
North, Adamawa, Far North	34.1	1.6	31.0
<i>Place of residence</i>			
Urban	40.5	49.4	41.3
Rural	59.5	50.6	58.7
<i>Mother education</i>			
No educated	35.5	6.0	32.7
Primary	39.8	33.8	39.3
Secondary and higher	24.7	60.2	28.0
<i>Occupation</i>			
Unemployed	20.4	17.2	20.1
Cultivators and workers	47.3	42.1	46.8
Trading	23.5	23.1	23.5
Employees	8.8	17.6	9.6
<i>Household Living Standard</i>			
High	36.7	43.5	37.4
Medium	19.4	20.0	19.5
Less	43.9	36.5	43.1
<i>Number</i>	<i>6047</i>	<i>619</i>	<i>6666</i>

Source: 1998 CDHS.

## 4. Findings

### 4.1 Out-of-wedlock children stay mostly in extended-family household or live apart from their mother

Overall, the majority of children regardless of legitimacy of their birth live with their mother in single parent and/or two parents household (table 2). Approximately 22% of all under fifteen children do not reside with their mother compared to 18% in 1978 and 14% in 1991 (McDaniel and Zulu, 1996). This shows the number of children not co-habiting with their mother is on the increase in Cameroon.

Table 2 – Children’s living arrangement by legitimacy of birth in Cameroon

Children’s living arrangements	% of children		
	Legitimate	Out-of-wedlock	Total
Live in single mother household	6.9	6.2	6.9
Live with single mother in extended household	7.2	31.5	9.5
Live with two biological parents	65.6	11.5	60.5
Live in a maternal step household	1.2	(3.4)	1.4
Don’t live with mother	19.1	47.4	21.7
Number	6 029	616	6 645
<i>Chi-square</i>	843.96***		

Notes: () Number <30; \* p<0.10; \*\* p<0.05; \*\*\* p<0.001 ; Source: 1998 – CDHS

Comparison between out-of-wedlock and legitimate children highlights that child-mother non-cohabitation and living with a single mother in an extended-family household are more frequent among out-of-wedlock children than among legitimate children. These results support demographic and microeconomic hypotheses, reinforced by some cultural norms that discourage single mother households, even if the 1998-CDHS data do not include a question on why unmarried mothers with their children live in an extended-family household. In fact, about half of out-of-wedlock children do not reside with their mother compared to 19 % for children born in union. In addition, about 32 % of out-of-wedlock children and their single mother are lodged in maternal parents’ household, while only 7 % of children born in union live in such conditions. In contrast and as expected, residence in a two parent household is more frequent among legitimate children (66%) compared to 12% for children born out-of-wedlock. Residence in a step household is rare. It represents only 1% of legitimate children and 3% of out-of-wedlock children. The microeconomic hypothesis could be reinforced by some cultural norms that discourage single mother household.

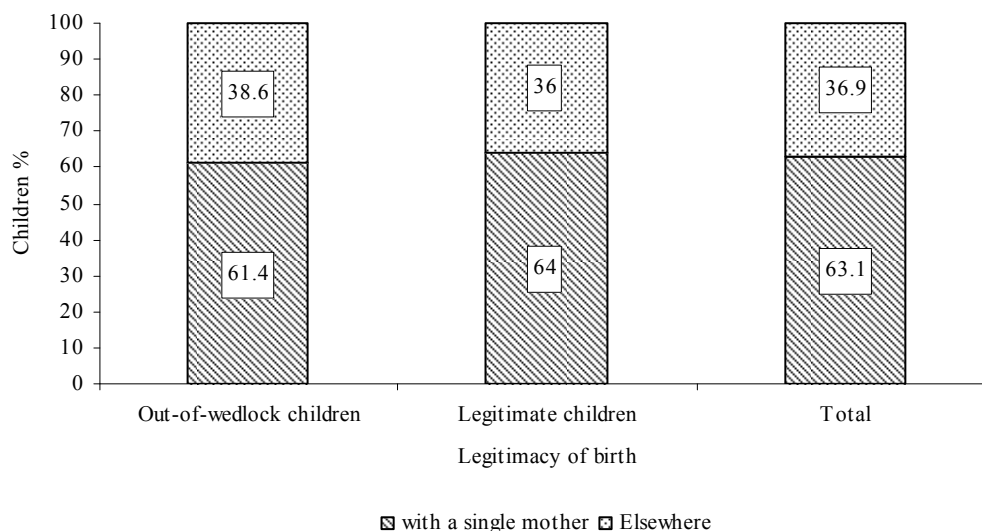
#### 4.2. Legitimacy of birth and child living arrangement: role of mother’ marital status at survey

Findings from stratified analysis and mixed multinomial regression (model 1, table 3) show no difference between out-of-wedlock and legitimate children regarding their living arrangement when the mother is unmarried at the time of survey (figure 1 and table 3). Indeed, in this case, the majority of children, regardless of legitimacy of their birth, reside with a single mother, mostly in extended-family households. In other words, union disruption and out-of-wedlock childbearing have a nearly equal influence on child living arrangements. This implies that women who give birth before ever being in union do not leave their parental household, as observed by Richter (1988) in Mexico and Colombia as well as by Ngondo (1991) in Kinshasa, Democratic Republic of the Congo. Likewise, widows and divorced as well as separated women return to parental or relatives household with their children. Reliance on parents or other family member’s economic and social support and some cultural traditions could explain these results. In fact, approximately 20% of children born out-of-wedlock and 11% of legitimate children have an unemployed mother. In addition, in many African cultures, young single mother headed household are regarded as “prostitutes”. They are exposed to rape or other types of sexual violence from some men where they live alone with



young kids. However, residence of widows and divorced and separated women with their children in extended-family household contrasts with findings from Latin America and Western societies where union disruption is a major factor of single parent household (Richter, 1988; Heuveline et al., 2003).

**Figure 1 - Living arrangements of legitimate and out-of-wedlock children when mother is unmarried in Cameroon (1998-CDHS)**



However, controlling for the relationship between legitimacy of birth and child living arrangements according to mother's current marital status by selected socio-demographic characteristics reveal that the likelihood of a child and mother not cohabiting is more important among out-of-wedlock children compared to legitimate children ( table 3, models 2).

**Table 3-Risk of living with a single mother than staying elsewhere among under 15 years children of unmarried mothers in Cameroon: Results from Multivariate logistic models**

	Model 1	Model 2
<i>Intercept</i>	1.68***	2.08***
<i>Legitimacy of birth</i>		
Out-of-wedlock children	0.95	0.82**
Legitimate children	Reference	Reference
% of variation compared to model 1	-	-13.7
<i>Likelihood Ratio (N=1000)</i>	0.00	933.63

**Notes:** \* p<0.10; \*\* p<0.05; \*\*\* p<0.001 ;

*Model 1:* Not taking account into mother's and household characteristics.

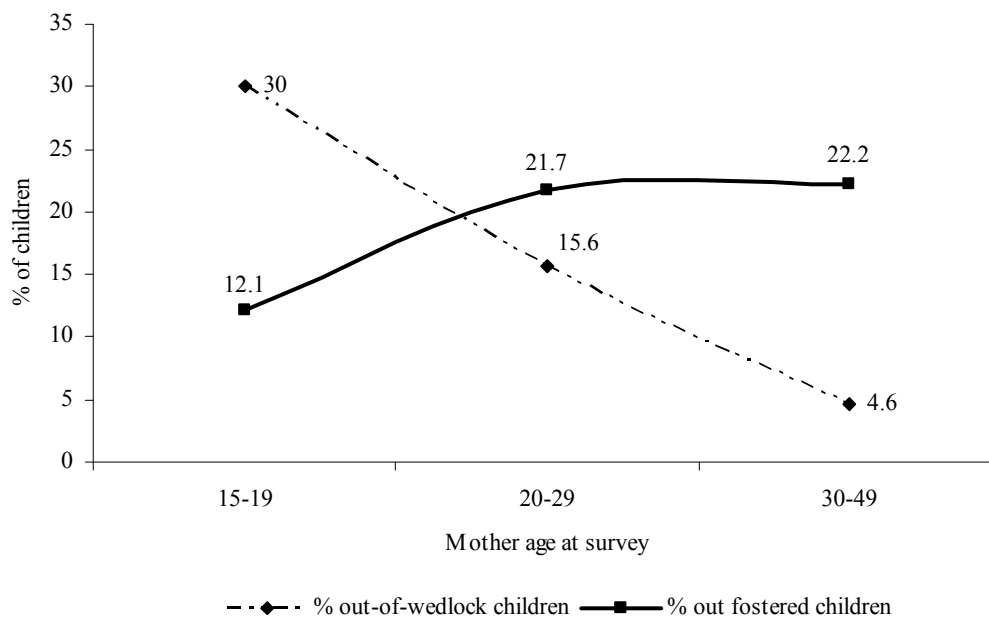
*Model 2:* Controlling for place of residence, region of residence, mother education, mother age, child age and sex, and Household living arrangement.

**Source:** 1998 – CDHS.

Mother' age and her occupation play an inhibitory role because the majority of out-of-wedlock children have a young mother and/or a mother working in the formal sector (employee). However, the proportion of

out-fostered children is lower among adolescents mother (figure 2), while employed mothers are more likely to be single mothers (table 4).

**Figure 2 - Proportion of out-of-wedlock and out fostered children by mother age in Cameroon (1998-CDHS)**



**Table 4 - Proportion of children living with a single mother and of out-of-wedlock children in Cameroon by mother occupation**

Occupation	% living with single mother	% out-of-wedlock children
Unemployed	11.5	7.9
Cultivators and workers	16.8	8.4
Trading	15.3	9.1
Employees	27.4	17.0

Source: 1998-CDHS

These figures explain a decrease in the observed propensity of out-of-wedlock children to live with their mother by 14% after controlling for mother and child characteristics. Taken as whole, for children whose mother are single at the time of survey, the effect of the legitimacy of birth on child living arrangements is ranked 3<sup>rd</sup>, while child' age following by mother's occupation are the most important factors that determine child living arrangements in Cameroon (table 5), with reference to the magnitude of their effect.

Table 5 – Magnitude of effects of independent and control variables on child living arrangement in Cameroon for unmarried mothers. Results from Multinomial logistic regression results

<i>Variables</i>	<i>Wald chi-square</i>
Legitimacy of birth	4.72**
Child' sex	0.81
Child' age	77.18***
Mother' age	0.97
Region of residence	4.64
Place of residence	0.76
Mother' education	0.81
Mother' occupation	31.13***
Household Living Standard	2.24
<i>Likelihood ratio (N=1000)</i>	<i>933.63***</i>

*Notes:* \*  $p < 0.10$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.001$ ; *Source:* 1998 – CDHS

Results (table 6) show that the risk of a child not living with his/her mother increases with the child's age. Considering mother' occupation, the likelihood of not living with the mother is higher among children whose mothers are unemployed. This supports the microeconomic hypothesis even if no difference is observed between poorest and richest households considering child out-fostering.

Table 6 – Risk of not living with unmarried mother in Cameroon by child age and mother occupation. Results from multivariate multinomial logistic regression results

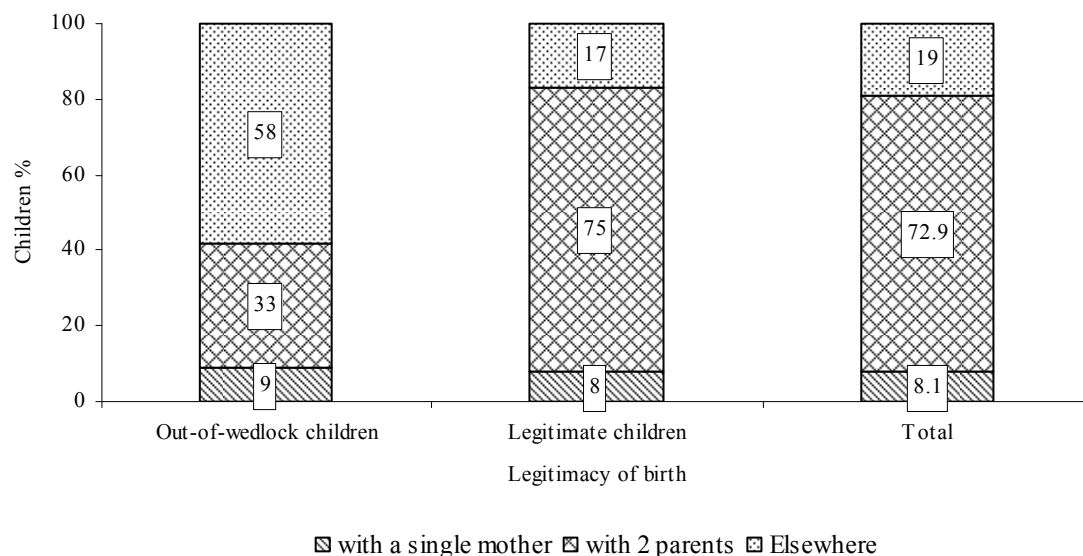
	Risk of not living with mother
<i>Child age</i>	
Less than 3 years	Reference
3 - 5 years	6.2***
6 – 11 years	10.4***
12 – 14 years	17.1***
<i>Mother Occupation</i>	
Unemployed	Reference
Cultivators and workers	0.35***
Trading	1.08
Employees	0.65**

*Notes:* \*  $p < 0.10$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.001$ ; *Source:* 1998 – CDHS

Previous research found similar results regarding out fostered children in Cameroon and other African countries (McDaniel and Zulu, 1996; Vandermeersch, 1999 and 2002). Nevertheless, the effect of household living standard on child living arrangement requires in-depth analyses.

Regarding children whose mother was in union at the time of the survey (figure 3 and table 7), it appears that majority of out-of-wedlock children do not co-reside with their mother while a higher proportion of legitimate children reside in a two parents household. The risk for an out-of-wedlock child to reside with his/her mother or in a two parent household is respectively 1.75 and 2.38 times lower than the risk that he/she resides elsewhere (non-habiting with the mother). This probably due to the fact that an important number of mother's partner for out-of-wedlock children are not the biological father with reference to the lower percentage of children living in a step family.

**Figure 3 - Living arrangements of legitimate and out-of-wedlock children when mother is married in Cameroon (1998-CDHS)**



Two hypotheses could explain these findings. First, the fear of the mother that children from a preceding union could be maltreated and/or the fact that these children are considered as obstacles to subsequent union (risk of union disruption) could lead to their non cohabitation with the mother. Thus, children born out-of-wedlock are often lodged in the maternal grandparents' household or in the biological father family household if paternity is recognized and the parents are not in union. Nevertheless, very young children often live with their mother regardless of legitimacy of birth, mother's marital status at survey and/or mother's partner is not the child's father. This situation explains the fact that controlling for age of child and of mother increases the odds ratio of co-habitation with the mother for out-of-wedlock children when the mother is married (see model 2).

Table 7 – Risk of living with a single mother than staying in alternative living arrangement among children aged under 15 years of married mothers according to the legitimacy of birth in Cameroon: Results from Multinomial logistic models

	Model 1		Model 2	
	Living with a single mother	Living with two parents	Living with a single mother	Living with two parents
<i>Intercept</i>	0.27***	1.58***	0.28***	1.99***
Legitimacy of birth				
Out-of-wedlock children	0.57***	0.36***	0.57***	0.42***
Legitimate children	Reference	Reference	Reference	Reference
% of variation compared to model 1	-	-	0.0	16.67
Likelihood Ratio (N=5645)	0.00		3963.62	

Notes: \* p< 0.10; \*\* p<0.05; \*\*\* p<0.001 ;

Model 1: Not taking account into mother's and household characteristics.

Model 2: Controlling for place of residence, region of residence, mother education, mother age, child age and sex, and Household living arrangement.

Source: 1998 – CDHS

Taken as a whole, the evidence in tables 7 and 8 support the legitimacy effect hypothesis. In fact, the magnitude of the legitimacy effect is ranked 2<sup>nd</sup> after child age effect. Paradoxically, child sex and household living standard do not have a significant effect at 5%.

Table 8 – Magnitude of effects of independent and controls variables on child living arrangement in Cameroon for married mothers. Results from Multinomial logistic regression results

<i>Legitimacy of birth</i>	132.70***
Child' sex	1.20
<i>Child' age</i>	276.06***
Mother' age	30.72**
Region of residence	40.99***
Place of residence	18.17***
Mother' education	37.83***
Mother' occupation	13.61**
Household Living Standard	5.04*
<i>Likelihood ratio (N=1000)</i>	933.63***

Notes: \* p< 0.10; \*\* p<0.05; \*\*\* p<0.001 ;

Source: 1998 – CDHS

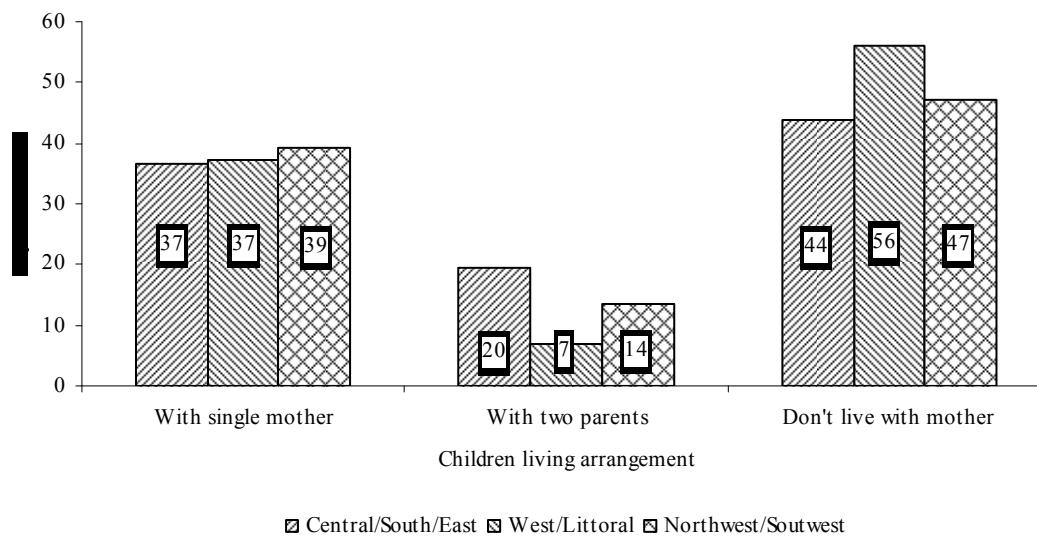
The risk of living in a two parent household is less among children whose mother is an employee and/or has a secondary education compared to children of unemployed and not educated mothers. On the other hand, the likelihood of living in a single mother household is higher among children whose mother has secondary or higher education as well as has an economic activity other than trading. The probable economic autonomy of employed women who are also most educated could explain their lower probability to foster out children. Considering the region of residence, the likelihood of living in a two parent household is less in Western region (Littoral, West, Northwest and Southwest) compared to the Northern and Southern regions.

#### 4.3 High propensity of living in two parent households among out-of-wedlock children in the Centre/South/East region

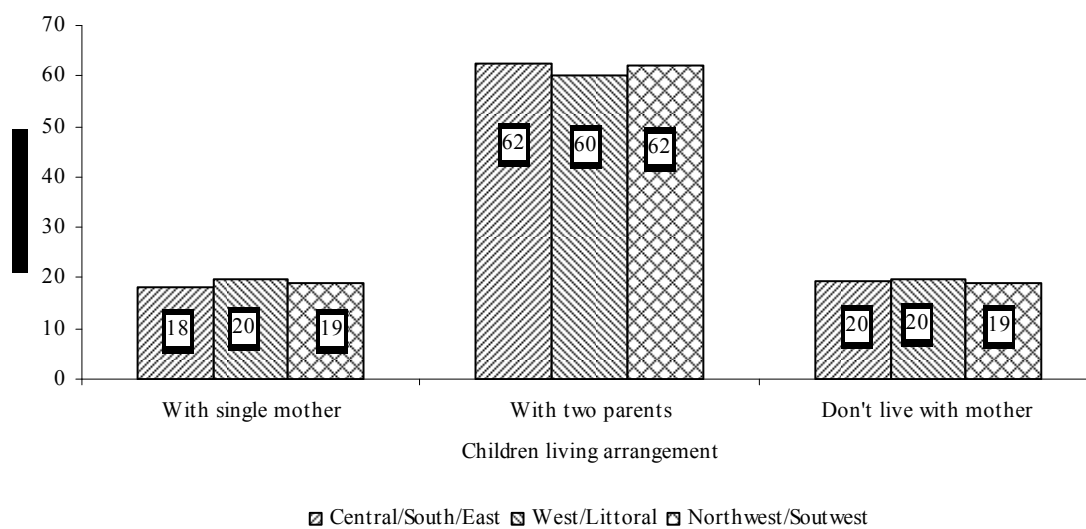
While in general children born out-of-union do not live in two parental households, differences are observed among these children according to their region of residence. The high proportion of out-of-wedlock children living in two parent households in Central/South/East regions compared with West/Littoral regions supports the anthropological hypothesis. In other words, the likelihood of getting married is higher among single mothers belonging to societies<sup>6</sup> whose traditions tolerate out-of-wedlock childbearing. In addition, in these societies, out-of-wedlock children are probably accepted by their step father (figure 4).

<sup>6</sup> While 51% of out-of-wedlock children in Central region (Beti-Fang ethnic group) have a married mother at the time of survey, this proportion is respectively 42% in West/Littoral, 39% in Northwest/Southwest and 30% in Adamawa/North/Extreme-North.

**Figure 4- Out-of-wedlock child's living arrangement by region of residence in Cameroon (1998-CDHS)**



**Figure 5 - Legitimate child's living arrangement by region of residence in Cameroon (1998-CDHS)**



To sum up, our analysis shows that dissociation between marital union and childbearing can be considered as one of multiple factors that influence household structure and child living arrangements in Cameroon, although the magnitude of this effect varies according to the mother marital status at the survey. In fact, while legitimate children live mostly in two parent households if their mothers are married at the time of survey, the majority of out-of-wedlock children do not live with their mother. These findings support interdependency between anthropological/cultural, demographic, microeconomic and interaction perspectives. They highlight (with caution due to small sample sizes in some cases the importance of further studies in this area in Cameroon.

### **Conclusion**

The objective of this research was to compare the living arrangements of legitimate children and those of out-of-wedlock children in Cameroon, and to identify the factors that account for the difference. Findings from our analysis have highlighted that out-of-wedlock childbearing reinforces the dissociation between childbearing and childrearing particularly if mothers are in union at the time of survey. Further, out-of-wedlock childbearing contributes to the formation of extended family-households. Three assumptions could explain these results. First, children from former union are often fostered to avoid union instability due to conflict between children and his/her step father. The second assumption presumes that observed differences could be due to African legislation and traditions which are mostly patrilineal, and encourage children to be brought up by their father or his family. Lastly, young unmarried mothers usually rely on their parents or others relatives for economic and social support in child rearing if the father does not recognize paternity. Further, findings show a difference between out-of-wedlock children considering their living arrangement by mother region of residence (ethnic group). In region or societies whose traditions tolerate out-of-wedlock childbearing (Beti-Fang living in Centre/South/East region), the likelihood of living in two parents household is higher than in other regions.

From the methodological point of view, this study has some limitations which do not detract from its scientific importance and contribution. In fact, Demographic and Health Surveys do not collect information on paternal recognition, child residential history, causes of child-mother no cohabitation, characteristics of children who do not reside with their mother and those of their guest household. In addition, analyses are based on only children and mothers that are alive, whereas child mortality could be associated with his/her living arrangement and single mothers could experience specific mortality patterns. Further, different categories of child living arrangements can be analyzed from a dynamic pattern at different stages in life course. Indeed, an individual can grow up in successively different categories of living arrangements, which may start differently according to whether child is born in union or out-of-wedlock. For instance, a child could pass from a single parent household to a two parent household, from a two parent household to

a step household through a single parent household, etc. Also, while theoretically, out-of-wedlock childbearing is supposed to occur in single-parent families and legitimate births are supposed to occur in two parent households; in reality situations are complex and vary across societies. In some African societies, namely in most Congolese societies, single pregnant women are cared for in the household of the presumed father of the unborn child until delivery if he is known. Such situations could confuse out-of-wedlock and legitimate child definitions and that of their living arrangements at birth, because in both cases childbearing has occurred in a two parent household or family. In the opposing direction, some legitimate children whose parents have separate residence are born in a single-parent family.

In conclusion, the high frequency of out-of-wedlock children who do not reside with their mother, or who reside in a maternal extended-family household, points to the need for as well as interest of in-depth studies on the relationship between legitimacy of birth, children's life course, and socioeconomic outcomes using longitudinal data. Indeed, child living arrangements and its dynamics are fundamental factors and indicators of child development insofar as they affect conditions of access to material, economical, social and psychological resources and thus child wellbeing.

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