

## Ethnic Diversity Management and Poverty in Developing Countries

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**Abstract.** *The main objective of this research is to analyse the effect of ethnic diversity management on poverty in developing countries. The literature review explained the relationship between ethnic diversity management and poverty on the one hand and provided a measure of ethnic diversity management on the other. Based on a sample of 62 developing countries, empirical analysis with two-stage least square (2SLS) estimator shows that ethnic diversity management affects poverty in developing countries. Effective management of ethnic diversity leads to social cohesion and improves the monetary and non-monetary well-being of households. However, ineffective management of ethnic diversity is a source of social exclusion and conflict, with perverse effects on the standard of living and living conditions of households.*

**Keywords:** diversity management, ethnic diversity, poverty

**JEL Codes:** Z10, Z13, I31, I32

### 1. Introduction

The need to eradicate poverty has given rise to several reflections in recent decades. It is in this regard that the United Nations has made it a global priority by placing it at the forefront of the Millennium Development Goals and the Sustainable Development Goals. However, achieving such a goal requires first and foremost identifying the different causes of poverty. A number of researchers have examined this problem and many economic, political, institutional, social and cultural causes have been identified.

At the economic level, Ravallion (1995), Dollar and Kraay (2002) and Adams (2004) point out that economic growth has a negative impact on the different aspects of poverty, which are monetary poverty and non-monetary poverty. The low economic performance of some developing countries would justify their high rates of poverty which, in addition, are struggling to decrease. However, economic growth remains a necessary but not sufficient condition for reducing poverty. Several factors such as the composition of government spending, inequalities, the dynamics of labour market, the level of industrialization and the level of involvement in international trade, also affect the level of poverty and can influence the effect of economic growth on poverty (Agénor et al., 2008; Akoum, 2008; Beck et al., 2005; Datt & Ravallion, 1992; Fan et al., 2000; Augustin Kwasi Fosu, 2017; Klasen et al., 2007). Indeed, the contexts marked by a strong orientation of public expenditure towards social investments, in particular roads and electricity, generally achieve inclusive economic growth and reduced poverty levels (Sasmal & Sasmal, 2016). In addition, other studies have found a negative link between the level of industrialization of the economy and poverty rates (Kimura & Chang, 2017). The increase in the level of industrialization of the economy is accompanied by an improvement in national income, investment and productive employment.

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At the political and institutional level, the quality of institutions and governance are, among other things, the main factors contributing to the explanation of poverty in countries. Countries with high rates of poverty are generally characterized by undemocratic practices, corruption, embezzlement of public funds, domination of the executive over the judiciary and legislature (Chong & Calderón, 2000; Perera & Lee, 2013; Tebaldi & Mohan, 2010).

At the social level, the causes of poverty are numerous and concern the socio-demographic characteristics of individuals or households. These include, for example, the place of residence, the size of the household, the sex of the head of household, his level of education, and his occupation (Grootaert, 1997; Mukherjee & Benson, 2003). Poverty is higher in rural households, households headed by women, or those in which the head is in precarious employment.

At the cultural level, many authors have questioned the role of culture in explaining aspects of poverty. Akerlof and Kranton (2000) relied on the concept of identity to develop a model in which individuals have preferences for behaviour that is specific to their cultural identity and derive their utility from that behaviour. Guiso, Sapienza, and Zingales (2006) develop a model in which beliefs and norms within groups affect individual preferences, which in turn affect their resources and economic decision-making. These practices are in part sources of social inequality. Ningaye (2011) analyses the effect of cultural values on multidimensional poverty in Cameroon and shows that differences in the dimensions of poverty result significantly, but not exclusively, from differences in cultural valuation systems between groups.

Beyond the above causes, other authors have analysed the impact of ethnic diversity on poverty. Miguel (2006) compares the effect of ethnic diversity on poverty in two districts in Kenya and Tanzania. Presenting collective action as all forms of action organized and undertaken by a group of individuals with a view to achieving common objectives and sharing profits, Miguel (2006) concludes that ethnic diversity is negatively linked to local collective action (and by extension poverty reduction) in the Kenya District, but not in the Tanzania District. The main explanation for this result is that ethnic diversity is more important in local public life in Kenya than in Tanzania. Churchill and Smyth (2017) examine the relationship between ethnic diversity and poverty through a panel of 60 countries. Contrary to the approach taken by Miguel (2006), they establish a direct relationship between ethnic diversity and poverty. By measuring ethnic diversity by the Fractionalization Index<sup>1</sup>, they indicate that ethnic diversity contributes to increasing levels of poverty, as well as levels of deprivation and multidimensional vulnerability. Overall, this work provides a new direction for explaining poverty.

This research joins the literature on the causes of poverty. It contributes to this literature by providing a new orientation to the analysis of the causes of poverty. In effect, few attention has been paid to the effect of ethnic diversity management on poverty. Past studies of Miguel (2006) and Churchill and Smyth (2017) have highlighted the impact of ethnic diversity on poverty. The main criticism addressed to these studies is that diversity does not allow to explain or predict the relationships between identities. Identity relationships are largely determined by the nature of the socio-economic and political arrangements that govern societies. When such arrangements are likely to marginalise certain identities, relations between identity groups may be conflicting. In addition, there is hardly any country in the world that is not characterized by diversity, yet all countries do not have the same problems related to diversity. Therefore, problems that may arise from the existence of several ethnic identities within a country can be attributed to the management of diversity (Economic Commission for Africa, 2011; Horowitz, 2000).

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<sup>1</sup> The fractionalization index provides the probability that two randomly chosen individuals in a given country belong to different ethnic groups

The rest of the paper is organized as follows. The following section presents the definition and the measurement indicator of ethnic diversity management. Section 3 analyses the transmission channels through which ethnic diversity management can transit to affect poverty. Section 4 shows the stylized facts. Section 5 presents the data and the empirical method. Section 6 presents and discusses the results and Section 7 concludes the paper.

## **2. Definition and Measurement of Ethnic Diversity Management**

### **2.1. Definition of the concept of ethnic diversity management**

Ethnic diversity refers to the plurality of ethnic groups living in the same country (Deng, 2008). As a development actor, ethnic groups compete for political and cultural power and economic resources. Such competition creates conflicts of interest and ideas which, according to the Economic Commission for Africa, can be managed peacefully by an effective system of governance that ensures that competition takes place within legal limits, and in addition, which provide equitable citizenship rights and equitable access to opportunities and resources for the development of all identity groups (Economic Commission for Africa, 2011). Without effective governance, ethnic groups can engage in violent conflict. Leaders, depending on their behaviour, can also cause ethnic conflicts. These are mainly the “ethnocratic” leaders who grant the privilege to the development of their ethnic groups (Mazrui, 1975) and the selfish autocrats who have as their main concern their continuance in power. It is within this framework of reflection that researchers indicate that diversity management refers to the consideration, by the public authorities and the various institutions, of the specificities of different identity groups and sub-groups (Economic Commission for Africa, 2011; Gagnon & Jouve, 2009). For fair management in a diversified context, the proposed responses must, according to the Economic Commission for Africa, be specific to the specific needs of the groups (Economic Commission for Africa, 2011).

Following this definition, it is important to consider how diversity is managed in the different countries. Diversity management incorporates three main elements: compliance with the legal and institutional provisions on non-discrimination and equal opportunity, the definition of a governance model, or a form of the State, which takes into account the participation of different ethnic groups in the decision-making process and respect for democratic rules.

With regard to legal and institutional arrangements for diversity management, several countries have defined laws that govern the effective management of their diversity. The international conventions on human rights and freedoms to which several countries have ratified are also part of this framework for diversity management.

Diversity governance models refer to territorial and administrative modes of organization. The main models are: the participatory model, the federalist model and the multicultural model. The participatory model is based on the mechanisms of proportional representation of identity (or ethnic) groups in different decision-making spheres (Commercio, 2011). The federalist model is based on the creation of federated states on the basis of differences that are generally ethnic. It guarantees a balance of power between states and ethnic autonomy. The multicultural model consists in including all ethnic groups in administrative management without legally determining the rules of balance within the institutions. However, the adoption of one of these models is based on several factors including the size of minorities, the level of geographical concentration of minorities, and the level of tension between ethnic groups (Commercio, 2011; Cornell, 2002; Malloy, 2005).

Respect for democratic rules is just as important. The Economic Commission for Africa highlights the important role of elections in the diversity management process (Economic Commission for Africa, 2013).

She indicates that several identity crises in Africa have arisen in the aftermath of the elections and are the result of challenges to electoral results. Moreover, the alternation in power and the holding of free and transparent elections are crucial for the maintenance of social cohesion.

## 2.2. Measuring ethnic diversity management

The variable “diversity management” is not directly observable. Following the work of Horowitz (2000), Barron, Kaiser, and Pradhan (2009) and Wimmer, Cederman, and Min (2009), diversity management can be equated to the quality of relationships between identity groups. In effect, effective management of ethnic diversity leads to social cohesion and ensures equal access to rights, institutions and resources for all different ethnic identities. On the other hand, ineffective management of ethnic diversity is a source of social exclusion and inter-ethnic conflict. The marginalisation of minorities leads to polarization of groups, ethnic tensions and in extreme cases to conflicts. Considering this definition, we have used the level of ethnic tension as a proxy for measuring ethnic diversity management.

*International Country Risk Guide (ICRG)* provides data for ethnic tension. According to the methodology used by the ICRG, ethnic tension is “an assessment of the degree of tension in a country attributable to racial or linguistic divisions<sup>2</sup>”. The ICRG assigns a score between 0 and 6 to each country to assess levels of ethnic tension. A score of 0 is allocated to high tension countries (ethnic conflict) and a score of 6 is allocated to countries that do not face ethnic tensions. To obtain the indicator “ethnic diversity management (*med*)” used in this work, we reversed the original value provided by ICRG using the following formula:

$$med_{it} = \frac{\max ET - ET_{it}}{\max ET - \min ET} \quad (1)$$

Where *minET* and *maxET* are respectively the minimum and maximum value of the ethnic tension, and *ET<sub>it</sub>* is the initial value of the ethnic tension of country *i* on date *t*. This transformation gives a variable whose values are between 0 and 1. Contrary to the initial indicator, the values of this variable increase with the associated level of ethnic tension, that is, the value 0 represents a low level of ethnic tension (effective management of ethnic diversity) and 1 represents a high level of ethnic tension characterizing ineffective management of ethnic diversity (presence of ethnic conflicts).

## 3. Ethnic Diversity Management and Poverty: Transmission Channels

Poverty goes beyond the monetary aspect and integrates the living conditions of households (access to housing, health, household equipment, etc.). The literature analyses several channels through which ethnic diversity management can be used to affect the change in poverty rates in a country. Two main effects of diversity management are expected depending on whether the management is effective or ineffective. Effective ethnic diversity management leads to social cohesion, mutual trust and living together. When ethnic diversity is well managed, it becomes a potential source of competitiveness and innovation. Indeed, areas where creative people with different cultures meet are more likely to generate new combinations of ideas and resources; which in turn encourages innovation, business creation, employment creation and economic growth (N. Lee, 2011; S. Y. Lee et al., 2004; Ozgen et al., 2011). Quigley (1998) and Glaeser, Kolko, and Saiz (2001) present the diversity of goods and services available as one of the attractive features of cities composed of several identity groups sharing cultural values. Montalvo and Reynal-Querol (2017) stress that ethnic diversity is positively associated with economic growth through its contribution to economic diversification. All these assets are likely to reduce poverty through their contribution to household

<sup>2</sup> For more details see [http://www.prsgroup.com/ICRG\\_Methodology.aspx](http://www.prsgroup.com/ICRG_Methodology.aspx).

income and living conditions. However, when managing ethnic diversity is ineffective, ethnic fractionalization can lead to economic, social and human damage with severe effects on poverty.

Barr and Oduro (2002) point out that ethnic fractionalization promotes discrimination and segregation in the labour market. Some people, because of their ethnic origin, may accumulate disadvantages in terms of employment, remuneration or promotion. These imperfections in the labour market exacerbate inequalities with adverse consequences for the well-being of households (Baye, 2006). Other work has indicated that ethnic fractionalization is associated with low economic growth and poor public policy performance (Easterly & Levine, 1997; Pecher, 2018). There are many reasons for this. Among them are the discouragement of investors and the inefficiency of public spending. Investors are generally attracted by the contexts that guarantee the security of their investments. Where such security is not guaranteed, investors tend to either reduce the volume of their investments to limit the risk of loss in the event of political instability, or to direct their investments towards secure contexts (Mauro, 1995). Alesina, Baqir, and Easterly (1999) and Miguel and Gugerty (2005) show that ethnic diversity negatively influences public goods provisions for education and employment. Inadequate or unevenly distributed public goods across the national territory can increase inequalities that in turn contribute to increasing poverty.

Ethnic diversity management can also have an effect on social capital, particularly trust and social networking (Alesina & Zhuravskaya, 2011; Dincer, 2011; Leigh, 2006; Sturgis et al., 2011). While it is generally demonstrated that in situations of imperfect information, the social network can provide benefits to agents with better social connections (Kranton 1996), several authors have indicated that ethnic polarization negatively affects social cohesion and consequently the expansion of the social network of individuals (Fafchamps, 1998; Miguel, 2006). Therefore, some people may lose opportunities in the labour market because of their ethnicity.

#### **4. Stylized Facts**

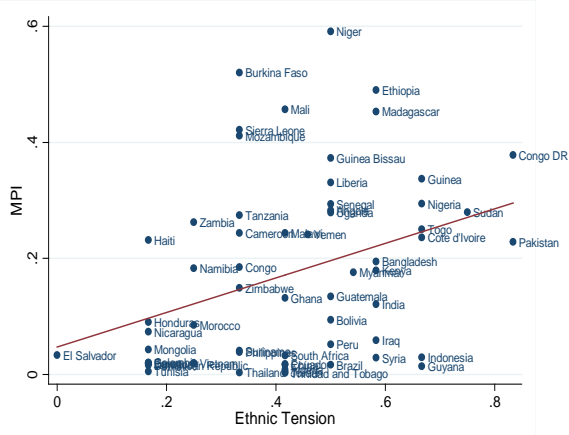
The fight against poverty is a central concern of the United Nations. Listed as the first of the Millennium Development Goals, it maintains the same rank in the Sustainable Development Goals. Multiple efforts by researchers and political actors around the world have led to a considerable reduction in poverty, although it is still high in some regions. According to the United Nations Development Programme (UNDP), the share of the world's population living below the international poverty line, set at \$1.90 per person per day, moved from 1.9 billion in 1990 to 836 million in 2015 (United Nations Development Programme, 2016). In addition to this monetary aspect of poverty, infant mortality has also declined significantly and household living conditions have improved significantly. In fact, the number of deaths of children under five years of age dropped from 12.7 million to 6 million between 1990 and 2015, more than 2.6 billion people accessed an improved source of drinking water and 2.1 billion people have access to improved sanitation.

These progresses in global well-being and living conditions are unevenly distributed regionally; developing countries have the greatest disadvantage with the highest poverty rates. In 2015, sub-Saharan Africa and South Asia accounted for more than 85% of the world's poor. The poverty rate in Sub-Saharan Africa is about 41% compared to 5% in the Middle East and North Africa (MENA) region in 2015. One of the main causes of continuing poverty in the MENA region is related to the conflict that some countries in this region have experienced over the past two decades (United Nations Development Programme, 2016).

Figures 1 to 6 show the scatter plots between ethnic tensions on the one hand and poverty measurement indicators on the other hand. These scatter plots predict a positive relationship between ethnic tensions and poverty.

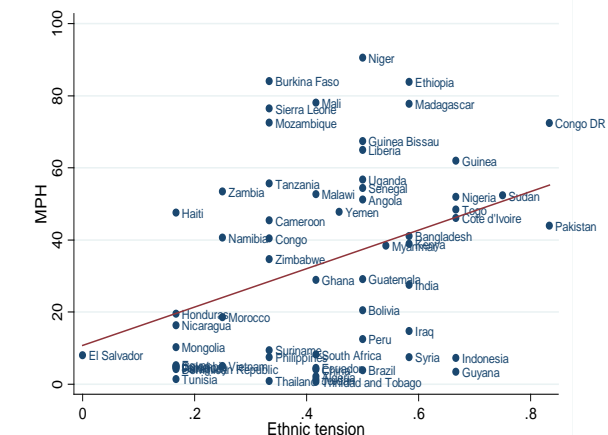


Figure 1: Ethnic tension and multidimensional poverty index



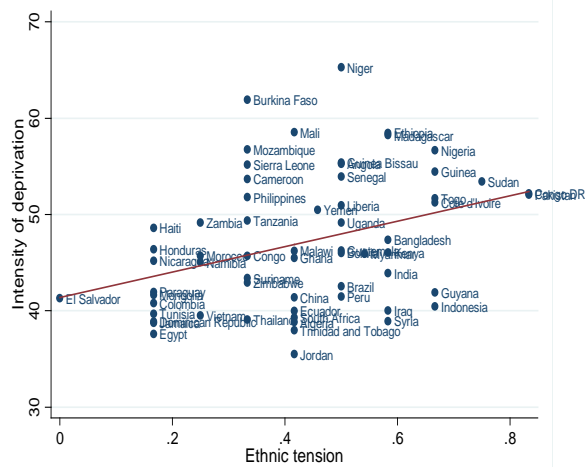
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Figure 2: Ethnic tension and multidimensional poverty headcount



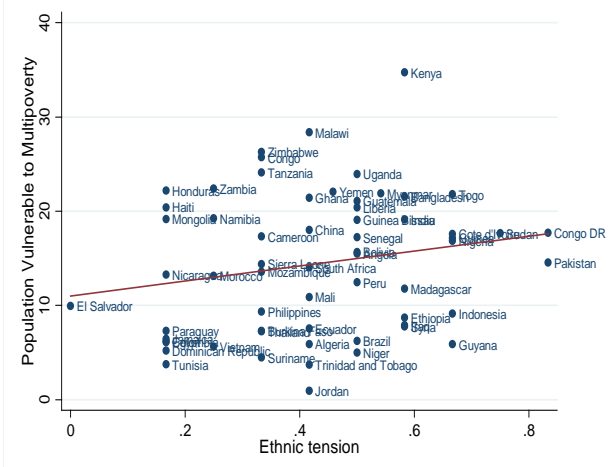
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Figure 3: Ethnic tension and deprivation intensity



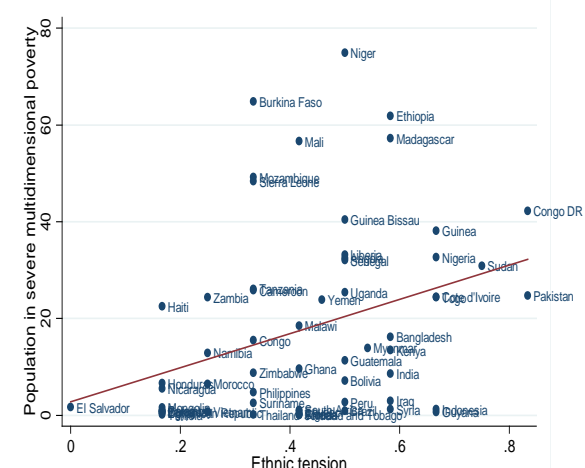
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Figure 4: Ethnic tension and vulnerable population



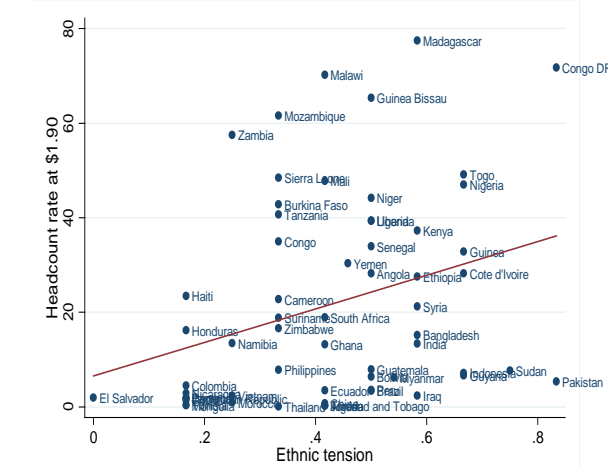
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Figure 5: Ethnic tension and severe poverty



Source : authors

Figure 6: Ethnic tension and poverty rate at US\$1.9



Source : authors

## 5. Methodology

### 5.1. Data and variables

Data relate to 62 developing countries in 2015. Indeed, 2015 is the most recent year for which there is sufficient data to estimate global poverty. The data come from various sources, including: United Nations Development Programme databases, World Bank database, International Country Risk Guide, Worldwide Governance Indicators and World Development Indicators<sup>3</sup>.

The main dependent variable is poverty. According to Churchill and Smyth (2017), we have captured poverty in developing countries by seven (07) indicators that are: the multidimensional poverty index (*mpi*), the Multidimensional poverty headcount (*mph*), Intensity of deprivation of multidimensional poverty (*idmp*), Population vulnerable to multidimensional poverty (*pvmpp*), Population in severe multidimensional poverty (*psmp*), poverty rate at the US\$1.90 per day threshold (*headcount*) and the poverty gap at the US\$1.90 per day (*povgap*). Taking all these indicators into account makes it possible not only to analyse the impact of ethnic diversity management on the monetary and non-monetary aspects of poverty, but also on vulnerability to poverty and the level of deprivation.

The variable of interest is ethnic diversity management (*med*). It is measured by the level of ethnic tension. Its values range from 0 (absence of ethnic tension, reflecting effective ethnic diversity management) to 1 (strong ethnic tensions, reflecting ineffective ethnic diversity management).

The control variables are: quality of the institutions (*goq*), gross domestic product per capita (*gdp*), the literacy rate (*liter*), the income inequality measured by the Gini index (*gini*) and the urbanization rate (*urb*). These variables are used by Churchill and Smyth (2017) to analyze the effect of ethnic diversity on poverty. With reference to the work of Easterly (2007), the quality of institutions is captured by the average of the six indicators for measuring the quality of institutions of the *worldwide governance indicators*.

### 5.2. Specifying the econometric model

The main objective of this work is to analyse the effect of ethnic diversity management on poverty. This section presents the empirical methodology developed for this purpose. Our econometric model is formulated as follows.

$$pov_i = \alpha + \beta med_i + \delta X_i + \varepsilon_i \quad (2)$$

Where  $i$  ( $i = 1, \dots, 62$ ) symbolizes countries, *pov* represents the measure of poverty; *med* represents ethnic diversity management,  $X$  is a vector of explanatory variables likely to affect the level of poverty in a country and  $\varepsilon$  is a residual term. Churchill and Smyth (2017) use a similar model for the analysis of the effect of ethnic diversity on poverty.

This model can be estimated using the Ordinary Least Square (OLS) method. But the OLS estimator has limitations when problems of endogeneity arise. These problems may result from unobservable values that influence the variable to be explained and certain explanatory variables. In addition, many countries often face widespread poverty, which disproportionately affects certain ethnic groups. This type of poverty poses serious risks of social instability and can pose endogeneity problems in econometric analyses.

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<sup>3</sup> List of countries that constitute our sample: Algeria, El Salvador, Liberia, Philippines, Sudan, Dominican Republic, Angola, Ethiopia, Madagascar, Senegal, Suriname, Trinidad and Tobago, Bangladesh, Ghana, Malawi, Sierra Leone, Syria, Guinea Bissau, Bolivia, Guatemala, Mali, South Africa, Tanzania, Vietnam, Brazil, Guinea, Mongolia, Namibia, Thailand, Yemen, Burkina Faso, Guyana, Morocco, Nicaragua, Togo, Zambia, Cameroon, Haiti, Mozambique, Niger, Tunisia, Zimbabwe, China, Honduras, Myanmar, Nigeria, Uganda, Ecuador, Colombia, India, Jamaica, Paraguay, Pakistan, Egypt, Congo, Indonesia, Cote d'Ivoire, Peru, Congo DR, Jordan, Iraq, Kenya

Thus, to account for endogeneity, we will estimate the parameters of the econometric model using the Two Stage Least Square (2SLS) method. The number of identity conflicts already recorded and the number of ethnic groups in each country are used as instruments for the variable ethnic diversity management. Taking account of regional specificities (use of regional dummies) is also important for analysing problems of endogeneity. In order to assess the convergence of the 2SLS estimator and the validity of the instruments, several statistical tests will be carried out. These are the endogenous tests (*Durbin – Wu – Hausman tests*) and the overidentifying restrictions test (Sargan and Basmann tests).

## 6. Result and Discussion

Table 1 presents the results of the estimation of the coefficients of equation 1 by ordinary least squares. These results indicate that ethnic tensions contribute significantly to increasing poverty in developing countries. An increase in the level of ethnic tensions leads to an increase in the multidimensional poverty index of the order of 0.081 in the same direction. This effect of ethnic tensions is 1.633 on the multidimensional poverty headcount, 4.083 on the intensity of deprivation of multidimensional poverty and 1.982 on the percentage of population vulnerable to multidimensional poverty. In addition, an increase in ethnic tensions increases the monetary poverty rate (at the threshold of US\$1.90 per day), with an intensity of 2.395 per unit of variation in ethnic tensions. It also increases the gap in income poverty with an intensity of 1.309. These results also indicate the positive and significant effect of inequality on poverty. However, economic growth, quality of institutions and literacy have a negative impact on poverty.

*Table 1: Ethnic diversity management and poverty with MCO estimator*

Variables	mpi	mph	idep	pvmp	psmp	headcount	pov_gap
Ethnic tension	0,081* (0,046)	1,633** (0,678)	4,083** (1,996)	1,982 (5,071)	1,035* (0,582)	2,395* (1,024)	1,309** (0,680)
gini	0,005*** (0,002)	1,024*** (0,281)	0,263** (0,108)	0,486*** (0,120)	0,471** (0,196)	1,531*** (0,283)	0,786*** (0,179)
urbanization	-0,001 (0,001)	-0,134 (0,201)	-0,062 (0,059)	0,015 (0,081)	-0,160 (0,156)	-0,041 (0,184)	0,0007 (0,090)
Institutional quality	-0,006 (0,042)	-2,561 (6,571)	-1,471 (2,222)	-5,235** (2,455)	-3,328 (5,811)	-1,890 (6,406)	-0,455 (3,178)
Gdp per capita	-0,002** (0,0008)	-0,004*** (0,001)	-0,001** (0,0004)	-0,002*** (0,0005)	-0,002* (0,001)	-0,004*** (0,001)	-0,002** (0,0008)
literacy	-0,005*** (0,001)	-0,744*** (0,141)	-0,202*** (0,046)	-0,031 (0,053)	-0,607*** (0,123)	-0,429*** (0,143)	-0,123* (0,071)
Constant	0,400*** (0,113)	56,07*** (17,80)	56,29*** (5,301)	-9,211 (6,769)	55,57*** (15,55)	-5,460 (19,39)	-16,32* (9,420)
Regional dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	39	39	39	39	39	39	39
R-squared	0,796	0,812	0,742	0,564	0,756	0,618	0,506
F	26,76	37,58	19,92	8,663	19,51	19,51	9,515

Note: \*\*\*, \*\*, \* reflect significance at 1%, 5% and 10% respectively. Values in parentheses are robust standard deviations.

Source: authors



Overall, the results of the analysis with the OLS estimator show the positive and significant effect of ethnic tensions on poverty. However, this OLS estimator presents biases that result from the endogeneity problem. The 2SLS estimator takes this problem into account. The Durbin–Wu–Hausman endogenous test indicates that the 2SLS estimator is convergent and significantly different from the OLS estimator. Regarding the validity of the instruments the overidentifying restrictions test indicates that the instruments are not correlated with the error term (Table 2). In addition, the coefficients of the variables are higher with the 2SLS estimator and the ratio between these coefficients and the corresponding standard deviations are mostly larger (Table 2) compared to those obtained with the OLS estimator (Table 1).

*Table 2: Ethnic diversity management and poverty with the 2SLS estimator*

Variables	Mpi	mph	Idep	pvmp	psmp	headcount	povgap
<b>Ethnic tension</b>	0,473** (0,241)	8,187** (3,955)	1,907* (1,087)	1,128 (1,113)	5,990* (3,198)	8,686** (4,219)	3,438* (1,944)
<b>gini</b>	0,0459* (0,025)	0,937** (0,418)	0,244** (0,115)	0,490*** (0,118)	0,405 (0,338)	1,447*** (0,446)	0,758*** (0,205)
<b>urbanization</b>	-0,011 (0,015)	0,036 (0,238)	-0,023 (0,066)	0,069 (0,067)	-0,031 (0,193)	0,123 (0,254)	0,056 (0,117)
<b>Institutional quality</b>	-0,077 (0,061)	-9,391 (9,982)	-4,204 (2,744)	-5,802** (2,809)	-12,36 (8,072)	-13,36 (10,651)	-3,427 (4,908)
<b>Gdp per capita</b>	- 0,029*** (0,001)	-0,053*** (0,002)	-0,012** (0,005)	-0,016*** (0,005)	-0,003** (0,001)	-0,006*** (0,001)	-0,002*** (0,000)
<b>literacy</b>	- 0,004*** (0,0011)	-0,611*** (0,172)	-0,172*** (0,047)	-0,025 (0,048)	-0,507*** (0,139)	-0,301 (0,184)	-0,080 (0,085)
<b>Constant</b>	0,217 (0,163)	25,44 (26,80)	49,29*** (7,367)	-7,758 (7,542)	32,42 (21,67)	-34,86 (28,59)	-26,27** (13,18)
<b>Regional dummies</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Observations</b>	47	47	47	47	47	47	47
<b>R-squared</b>	0,661	0,677	0,637	0,559	0,617	0,424	0,397
<b>Wald chi2</b>	94,69	101,4	81,99	49,63	79,88	44,23	33,19
<i>endogeneity</i>							
<b>Durbin (score)</b>	5,298**	5,662**	3,214*	5,095**	4,539**	4,037**	4,762**
<b>wu-hausman</b>	4,873**	5,264**	3,785*	5,757**	4,083*	3,579*	4,467**
<i>Instrument validity</i>							
<b>First stage F-stat</b>	14,768	14,768	14,768	14,768	14,768	14,768	14,768
<i>Overidentifying restrictions</i>							
<b>Sargan (score)</b>	4,856	5,785	5,109	6,125	4,240	4,057	2,688
<b>Basman</b>	4,125	5,051	4,371	5,402	3,537	3,367	2,146

Note: \*\*\*, \*\*, \* reflect significance at 1%, 5% and 10% respectively. Values in parentheses are robust standard deviations.

The results in Table 2 show that the increase in inequality, captured by the Gini index, leads to an increase in the level of poverty. The impact of inequalities is of the order of 1.447 on the incidence of monetary poverty and of 0.0459 on the multidimensional poverty index. This finding is consistent with previous research, notably (Baye, 2006; Augustin Kwasi Fosu, 2017). According to them, inequality is one of the factors that cause and sustain poverty. The results in Table 2 also show that institutional quality, economic growth and literacy each have a negative effect on poverty. An improvement in the quality of institutions has an effect of -0.077 on the multidimensional poverty index, of -5.802 on the percentage of population vulnerable to multidimensional poverty and of -13.36 on the poverty rate at the \$1.90 threshold; although the effect is not statistically significant on all poverty measurement indicators. However, the effect of economic growth is statistically significant and negative on all poverty indicators. It is in the order of -0.029 on the multidimensional poverty index, -0.006 on the monetary poverty rate and -0.002 on the income poverty gap. This result supports the argument that economic growth is important for poverty reduction (Adams, 2004; Dollar & Kraay, 2002; Ravallion, 1995). Overall, there is a mixed effect of urbanization on poverty in developing countries. Indeed, unplanned urbanization as seen in recent decades in several developing countries may not be accompanied by improved living conditions for households (Chen et al., 2014; Lipton, 1977). The main cause is the lack of decent employment and difficulties in accessing housing, drinking water and basic social infrastructure in urban areas.

Regarding the effect of ethnic diversity management on poverty, the results in Table 2 present the level of ethnic tension as an explanatory factor of poverty in developing countries. An increase in the level of ethnic tension leads to an increase in poverty. The effect is of the order of 0.473 on the multidimensional poverty index, of 8.187 on the multidimensional poverty headcount, of 1.91 on the intensity of deprivation of multidimensional poverty, 5.99 on the percentage of population in severe multidimensional poverty, 8.686 on the poverty rate at the US\$1.90 per day threshold, and 3.438 on the monetary poverty gap. According to the literature, it is generally presented that ethnic tensions are accompanied by the risks of ethnic conflicts, and thus generate negative externalities that affect the attractiveness of investments, tourism, and the efficiency of public expenditures (Bardhan, 1997; Augustin Kwasi Fosu, 2003; Stavenhagen, 1996). When ethnic tensions lead to conflict, the consequences are greater, including employment losses, the closure of certain businesses, involuntary migration, and human and material losses. Thus, developing countries need to develop effective ethnic diversity management mechanisms in order to improve the effectiveness of anti-poverty policies. As the Economic Commission for Africa states, effective diversity management must be achieved through a number of practices, including the application of democratic principles, non-discrimination, the equitable allocation of state resources and improving the quality of institutions (Economic Commission for Africa, 2013). Practices to boost economic growth and literacy are also necessary for poverty reduction.

## 7. Conclusions

The main objective of this research was to analyse the impact of ethnic diversity management on poverty in developing countries. A review of the existing literature has explained the relationship between ethnic diversity management and poverty. This suggests that ethnic diversity management can have two distinct effects on household poverty. On the one hand, when diversity management is effective, it leads to social cohesion, living together and avoiding social tensions. This contributes to the reduction of poverty through mechanisms such as the attractiveness of investors, innovation and tourism. On the other hand, when diversity management is not effective, it leads to social exclusion, ethnic polarization and conflict, with harmful consequences for household income and living conditions. The sample consists of 62 developing countries in 2015. The 2SLS estimator is used to correct endogeneity problems in the

econometric model. Since the variable “ethnic diversity management” is not directly observable, we approximated it by the level of ethnic tension. Thus, mismanagement of ethnic diversity results in strong ethnic tensions while good management of ethnic diversity is characterized by the absence of ethnic tensions. The main results show that ethnic tensions are deteriorating the well-being and living conditions of households. Increased levels of ethnic tension are accompanied by increased poverty. Thus, diversity management, which tends to promote social cohesion, is favourable for the improvement of household living conditions and hence for the reduction of poverty.

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