# POLICY DIALOGUES

# Where do social inequalities come from in Côte d'Ivoire?

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### PITCH

The LAMPE study on the determinants of social inequalities in Côte d'Ivoire<sup>1</sup> shows a persistence of inequalities between 2008 and 2015. In particular, inequalities in participation in the labor market between households headed by women and those headed by men subsist over the period.

The study also shows that in obtaining income:

- The most educated have higher per capita income;
- Employment, land ownership, type of housing, and access to electricity and drinking water lead to higher per capita income;
- Households in rural areas have lower per capita income than those in urban areas.

The factors that explain the greatest share of inequalities are:

- In 2015, access to drinking water (27.2%), education (21.3%), type of housing (16.58%), urban or rural area of residence (12, 8%), and gender (11.9%). They are followed by employment status (5.57%) and access to electricity (3.69%).
- In 2008, access to drinking water and the level of education contributed 48.5% overall to inequality.

## ISSUES

Determining what the explanatory factors of inequalities are has taken an important place in the debate on inequalities. What are the main determinants of social inequalities?

This question has long been at the heart of economic debates, but has yet to receive a definitive answer. Recent work has attempted to assess the extent to which general factors such as globalization or technical changes could be at the origin of the rise of inequalities in our societies. Others have tried to determine whether the egalitarian character of a society is favorable or unfavorable to economic development. It thus appears that the search for the origin of inequalities is still active and controversial.

Rising inequalities are a concern in all countries, and Côte d'Ivoire is no exception. Indeed, the Gini index was 0.50 in 2002 against 0.42 in 2008, and 0.40 in 2015. In urban areas, it went from 0.51 in 2002 to 0.44 in 2008, then to 0.39 in 2015. In rural areas, it increased from 0.41 in 2002 to 0.43 in 2008, before falling to 0.38 in 2015. It is clear that inequalities have not achieved a significant decrease.

However, while the effects of inequality have been the subject of

several studies, very little work has focused on their causes. In this context, it was necessary to examine the explanatory factors of inequalities in Côte d'Ivoire.

## METHODS

The LAMPE study measures the relative contributions of different factors to inequality, both at the individual and household levels. It is based on regressions and on the Shapley decomposition method. The first step in the regression-based methodology is to specify and estimate an income generation which equation in income is regressed on explanatory variables with characteristics at the individual and household levels.

Then, starting from the specification and estimation of an income generation equation, the Shapley value approach provides an exact additive decomposition of any measure of inequality into its various contributing factors. Finally, it also provides the unexplained proportion of inequality as the difference between the measure of inequality calculated from the observed values of income and the same measure calculated from the predictive values of income. The relative weight of a factor is obtained as the Shapley value of that factor.

Authors Bédia François AKA, Koffi Christian N'DA, Nadjaman Key words Inequalities, contributing factors OUATTARA, Arthur OUATTARA

Geography Côte d'Ivoire

Themes Economics, inequalities

Find out more about this project: Inequalities in access to basic services and impact of public policies in Côte d'Ivoire





#### RESULTS

The results of the estimation of the income generation equation show that:

In 2008 and 2015, the number of households headed by a woman is negatively correlated with per capita income, which means that the fact that a household head is a woman leads to a lower income level. There are therefore gender inequalities in participation in the labor market in Côte d'Ivoire.

The education level is positively correlated with per capita income, which indicates that the more educated have higher per capita income.

In 2008 and 2015, employment status and land ownership are positively correlated with income. Employment and land ownership therefore lead to higher income.

The type of housing, access to electricity and drinking water are also positively correlated with income, indicating that access to these variables makes it possible to have higher per capita income, or that only people with a certain level of income have access to these basic social services. Households living in rural areas have lower per capita income than those living in urban areas.

After having specified the model of income generation, we determined the relative contribution of each factor to the inequalities measured by the Gini coefficient through the decomposition of the Shapley value.

The factors that explain the largest share of inequalities are presented in Table 1.

In 2015, access to drinking water was the biggest "contributor", followed by education, type of housing, place of residence (urban or rural), and gender. Employment status and access to electricity come last.

In 2008, education was the biggest "contributor", followed by access to drinking water, place of residence (urban or rural), employment status, access to electricity, and housing type. Gender, access to land, and age (0.28%) come last.

These results indicate that access to drinking water and education remain the most significant "contributors" to income inequalities, to which they contributed 48.5% overall in 2008 and 2015 in Côte d'Ivoire. In the end, inequalities in access to education and drinking water, place of residence (urban, rural), and type of housing have an unfavorable impact on the distribution of income in the country.

# Table 1. The explanatory factors of inequalities

#### Source: authors' calculations

20082015Access drinking water21,327,2Education21,621,3Type of housing9,1816,58Place residence (urban-rural)12,812,8Gender4,1811,9Employment status11,45,57Access electricity10,153,69Access to land1,46-	Explanatory factors	Contribution to inequalities in %	
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Type of housing9,1816,58Place of residence (urban-rural)12,812,8Gender4,1811,9Employment status11,45,57Access electricity10,153,69Access to land1,46-		21,3	27,2
PlaceofPlaceofresidence12,8(urban-rural)12,8Gender4,1811,9Employment11,4status10,15Access to land1,46	Education	21,6	21,3
residence (urban-rural)12,812,8Gender4,1811,9Employment status11,45,57Access to electricity10,153,69Access to land1,46-	Type of housing	9,18	16,58
Employment status11,45,57Access electricity10,153,69Access to land1,46-	residence	12,8	12,8
statusII,45,57Accessto electricity10,153,69Access to land1,46-	Gender	4,18	11,9
ID,1510,153,69Access to land1,46-		11,4	5,57
		10,15	3,69
Age 0,28 -	Access to land	1,46	-
<b>~</b>	Age	0,28	-

#### RECOMMENDATIONS

These results allow identifying the factors that explain the differences in per capita income on the one hand and those that explain inequalities on the other. They thus provide some avenues to fight inequalities effectively.

- First, access to basic infrastructure (drinking water and electricity) should be a priority in policies.
- Second, access to education and employment should be favored.
- Third, access to housing is a necessity for the population.

Finally, policies should target rural areas of residence, which are the most disadvantaged.

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<sup>&</sup>lt;sup>1</sup> AKA, B.F et al. (2020), « D'où proviennent les inégalités en Côte d'Ivoire ? », AFD research papers.