

Income inequality in Africa, 1990-2017

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Overview

This issue brief makes a first attempt to estimate the evolution of income inequality in Africa from 1990 to 2017 by combining surveys, tax data and national accounts in a systematic manner. The low quality of the raw data calls for a lot of caution. Results suggest that income inequality in Africa is very high, and stands at par with Latin America or India in that respect. Southern and Central Africa are particularly unequal. The bulk of continent-wide income inequality comes from the within country component, and the between country component was even slightly reduced in the two last decades, due to higher growth in poorer countries. Inequality was rather stable over the period, with the exception of Southern Africa. Dualism between agriculture and other sectors and mining rents seem to be important determinants of inequality. We stress the need for improved transparency and statistical capacities, at the level of African countries and at the level of Africa as a whole, to properly monitor the distribution of economic growth in coming decades.

Introduction

While debates in academia and among the general public have focused extensively on poverty reduction and growth takeoff in Africa, still little is known about the extent of income inequality across the continent and its evolution over past decades. Despite strong economic growth in many African countries, human development and poverty indicators have not progressed as expected. This phenomenon has fueled a renewed interest for the study of inequality in Africa, which was seen as one of the main causes of the weak effect of macroeconomic growth on poverty reduction.

In a new paper, we attempt to partially overcome the limits of existing data sources to draw a cautious picture of the level and evolution of income inequality in Africa since the 1990s until today. Our results point to particularly strong and persistent income gaps between African citizens, which are primarily due to differences in income levels within countries. That being said, the very low quality of available surveys point to the need for improved statistical capacities and for pan-African data collection initiatives to properly monitor the distribution of growth in African countries.

The limits of existing data sources

Is Africa a high-inequality developing region? It has long been thought that Africa was too poor to be unequal, and African inequality levels are still debated today. One issue is that analyses on African inequality levels are typically made on the basis of household surveys, which provide a rich set of socio-economic information on inequality but also have several important limitations when it comes to comparing actual income inequality levels across countries.

From one country to another, household surveys may inform on different types of welfare concepts (e.g. disposable income, taxable income or consumption) and may use different ranking concepts (individual, household or equivalence scales). Moving from one concept to another might radically modify the income distribution in

a country and the level of inequality observed. While studying inequality across countries or regions, it is thus necessary to compare distributions as systematically as possible. In addition, household surveys tend to misreport top incomes due to sampling and non-sampling errors, which typically leads to underestimation of inequality levels.

In order to get a more consistent picture of income inequality in Africa and obtain figures comparable to other world regions, we have attempted to account for these issues by combining different types of data sources: surveys, tax data and national accounts. The combination of surveys with tax data in Côte d'Ivoire and South Africa, the two countries for which we have access to administrative data sources, shows that top incomes are significantly underestimated. The average income of top 1% earners is for instance systematically underestimated by more than 50%, a regularity which we use to estimate "corrected" inequality estimates for other African countries.

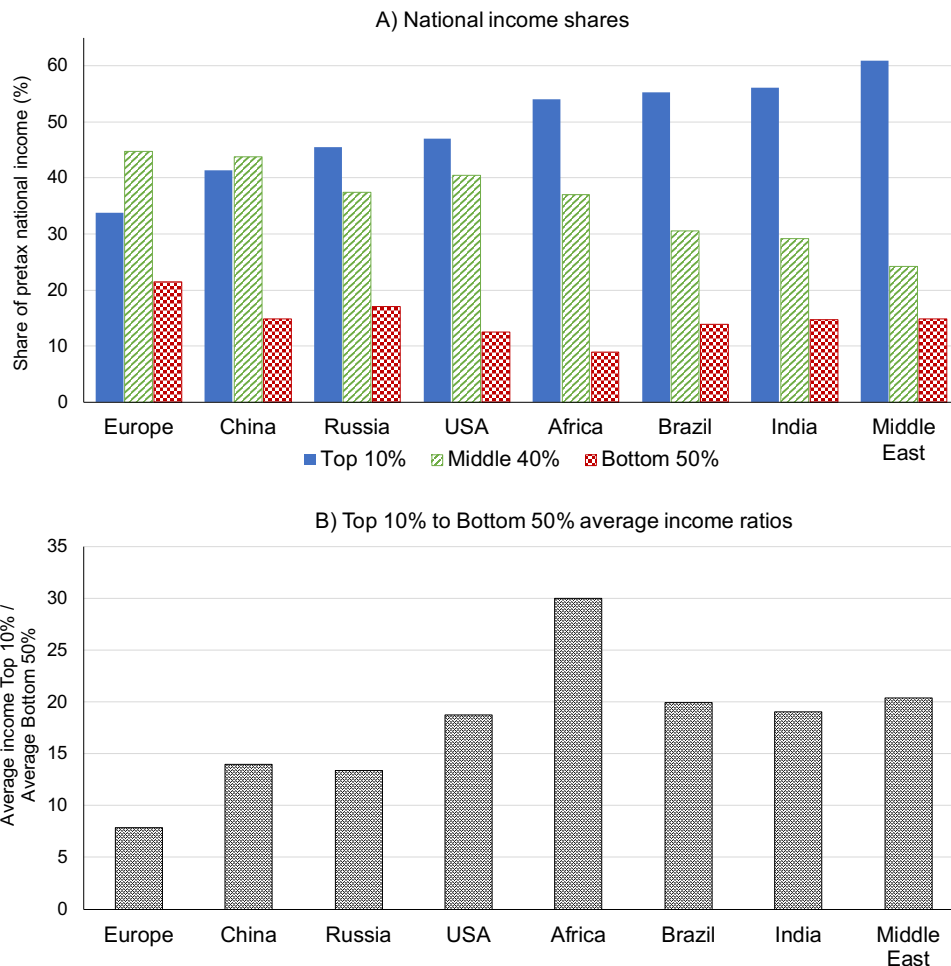
In a second step, we combine these estimates with official figures from national accounts: this allows us to obtain inequality statistics which are fully consistent with macroeconomic growth, and therefore to understand which income groups in which African countries benefited most from economic growth in the past decades.

Despite our efforts to make available data sources comparable to those found in other world regions, we should stress again that these corrections are by no means satisfactory. Only with proper data collection and transparency efforts – at the level of individual countries or at the level of Africa as a whole – will researchers and the general public be able to correctly understand who benefits from the expansion of the economy in the coming decades. Designing high-quality surveys and releasing administrative data will therefore be key to implementing good policies for the future.

How unequal is Africa?

Our main finding is that Africa stands out as an extreme income inequality region by international stan-

Figure 1. Inequality levels across world regions, 2017



dards, with a top 10% national income share of 54% and a bottom 50% share below 10% (figure 1). Africa has the highest gap between average incomes of the top 10% and incomes of the bottom 50%: average incomes of the top 10% are about 30 times higher than those of the bottom 50%, well above the value found in other extreme inequality regions (the gap is around 20x in other extreme inequality regions such as the Middle East, India or Brazil). This sheds light on the dual nature of the pan-African income distribution, with extremely low incomes at the bottom and relatively high incomes at the top. It also reveals the need to go beyond synthetic indicators (such as the Gini coefficient), which fail to properly account for the structure of inequality.

These figures do hide important heterogeneities: the income earned by the top 10% of the distribution ranges from 37% in Algeria to 67% in Botswana, while the bottom 40% is at most 14% in Algeria, and is as small as 4% in South Africa. On average, income gaps are highest in Southern and Central Africa and lowest in Northern Africa.

What contributes to African inequality: is it mostly inequality within African countries or mostly inequality in average income levels? If we decompose overall inequality between what is imputable to national average income disparities (between-country inequality) and what is due to inequality within countries, it clearly stands out that inequality within countries explain most

Figure 2. Decomposition of Pan-African inequality: top 10% income share, 1995-2015



of pan-African inequalities (figure 2). If there were no inequality between countries, but keeping constant current within-country inequality levels, the top 10% income share in Africa would be only slightly different from what it actually is (it would be 50%, vs. 55% in reality). Conversely, if within each country, all individuals were perfectly equal, but keeping national average income differences as they currently can be observed across Africa, the top 10% income share would substantially drop, to 21%. A decomposition of African inequality levels (using the Theil index) shows that 25% of African inequality can be attributed to between-country differences and as much as 75% to within-country inequality.

The slight decline in overall inequality is entirely due to the dynamics of between-country inequality. Since 1995, there has been a tendency towards less average income inequalities between countries. This reduction is caused by several phenomena. Since the years 1990, several countries, located at the middle of the African

ladder of national income per capita, such as Nigeria, Morocco, Ghana, Angola, Tunisia, Namibia or Lesotho, saw their average income increase significantly. On the other hand, the average income of Africa's richest countries (Algeria, South Africa, Libya for example), stagnated in the years 1990, and increased moderately in the years 2000. However, the poorest countries did not experience any significant average income rise. This is why, assuming perfect equality within countries, the top 10% share decreased more than the bottom 50% increased.

How to account for different inequality patterns in Africa?

What causes such high inequality levels in Africa as compared to the rest of the world? This issue remains open and it is particularly challenging to address because of strong data limitations, as well as of the specificity and diversity of Africa's economic and political structures, shaped by its recent history and colonial heritage.

In order to better investigate the interplay between income inequality and economic structure, we analyzed the relationship between the top 10% income share and the agricultural employment share, the productivity of labor in agriculture relative to the non-agricultural sector, an indicator for informality, the unemployment rate, and the share of mining rents in the gross domestic product.

Three groups of countries emerge from the classification of countries according to these variables. The most unequal one is mostly composed of ten countries from Southern and Central Africa with a large services sector as well as high levels of informal employment and unemployment. Mining rents are substantial in many countries and agricultural productivity is relatively low (except in Namibia and South Africa). The second group of 22 countries is less unequal. These are countries where agriculture makes a very large share of employment but has very low relative productivity, and where conversely the service sector is small and shows relatively high remunerations, which often corresponds to administration workers. The third and last group of 16 countries displays even lower inequality levels. Like the first group, these countries are relatively urbanized and the service sector gathers a significant share of employment. In contrast with the first group however, mining rents are limited, as well as unemployment, and the relative productivity of agriculture is much higher.

These findings confirm the important role of dualism in explaining inequality, and they are suggestive that mining rents are also inequality increasing. Yet, we should stress that they have two important limitations. First, the analysis might partly capture regional effects: the most unequal categories are also the ones with a majority of countries from Southern and Central Africa. Inequality variation across African regions are also the results of various historical factors, such as specific colonial legacies, past land distribution, or the lasting impact of strong racial inequalities in Southern Africa. Historical causes and structural economic factors should not be confused, and distinguishing their respective role should be undertaken in future research.

Re-examining the link between African growth models and inequality can have several implications for public policies. They support the call for a renewed interest in agricultural productivity enhancement. Its impact on inequality is indeed also tightly linked to the distribution of land rights. Property rights and land access reforms are thus needed and the proper articulation of these two types of policy is a central issue. Access to land is a particularly serious problem in Zimbabwe and South Africa for instance, where the agrarian reform failed to solve the issue.

Other dimensions of the “African” structural transformation, such as the growth of extractive industries, are also likely to contribute to unequal growth. Among the most resources-dependent countries, some have indeed experienced an inequality increase, like Angola or Chad, others, like Algeria followed the opposite pattern. This issue is thus complex, and should be tackled in more depth. To that purpose, better quality data is needed: data cover only a short time period in Chad, Angola, or Nigeria for instance, and thus limits our understanding of the impact of extractive industries on inequality.

Even if available data remains scarce, there is a need to stress the role of tax revenue and government spending in reducing inequality. In spite of this diversity, most African countries have low government revenue, and consequently limited fiscal space. This hinders their capacity to provide good public services, such as health services or education, and to finance social protection and transfers, and thus limits importantly their influence over income inequality. Fiscal space can be improved through several channels, among which more efficient fight against tax evasion, better inclusion of informal activities into the tax system, or progressive taxation. Overall, it appears that most African countries have significant progress to make regarding redistribution, from the increase of fiscal space to the improvement of tax progressivity, the implementation of efficient social protection systems and the provision of good quality public services. These issues are all the more pressing as research suggests that improvements along these margins could be key drivers of inequality reduction.

Concluding remarks: towards African Distributional National Accounts?

We stress once again that the novel inequality dataset produced for African countries is still very imperfect and will have to be improved as novel national accounts, survey and tax data are released in the future. The lack of transparency on income and wealth aggregate and distributional statistics in Africa remains an issue in itself - beyond the observed trends in income and wealth inequality in African countries. The strengthening of a regional statistical body in Africa should be a policy priority. Such an institution could assist national statistical agencies in the production of comparable income, wealth, but also consumption data. The World Inequality Lab and its network of partner institutions are committed to help all actors seeking to increase the quality and transparency of economic statistics in Africa.

Learn more about income inequality in Africa

This issue brief is based on recent research work done by the authors. In a new working paper, they make a first attempt to estimate the evolution of income inequality in Africa from 1990 to 2017 by combining surveys, tax data and national accounts in a systematic manner.

All the data and computer codes are available online at WID.world, and the data series are incorporated into the WID.world online simulator, allowing users to find out where they stand in the distribution of income in Africa and in specific African countries.

🔗 Complete study: Chancel, Lucas, Denis Cogneau, Amory Gethin and Alix Myczkowski (2019), “How large are African inequalities? Towards Distributional National Accounts in Africa, 1990-2017”, WID.world Working Paper n. 2019/11.

🔗 Where are you in the African distribution of income? Find out at <https://wid.world/simulator!>

The World Inequality Lab

The World Inequality Lab aims to promote research on global inequality dynamics. Its core mission is to maintain and expand the World Inequality Database. It also produces inequality reports and working papers addressing substantive and methodological issues. The Lab regroups about twenty research fellows, research assistants and project officers based at the Paris School of Economics. It is supervised by an executive committee composed of 5 co-directors. The World Inequality Lab works in close coordination with the large international network (over one hundred researchers covering nearly seventy countries) contributing to the database.

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