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### What's New About Income Inequality in Africa?

### **Anne-Sophie Robilliard**

#### **Overview**

This brief tries to provide some insights about the magnitude and evolution of income inequality across African countries using the most recent data available on WID.world. Three main results are worth highlighting. First, the analysis confirms that inequality levels in the African region are extremely high, with average country-level top 10% income shares estimated at 50%. Second, we show a clear North-South gradient of increasing inequality across the continent, which reflects both the situation at Independence and the political economy and institutions that followed. Third, inequality levels seem to have changed very little on average over the last decades but contrasted dynamics are observed at the sub-regional level. These dynamics remain to be investigated.

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### How high is inequality in Africa?

As shown by Chancel et al.,<sup>1</sup> income inequality is very high in the Africa region and the 2020 WID regional update – which incorporates 18 new survey data points<sup>2</sup> – confirms this finding<sup>3</sup>. Looking at country level inequality, Figure 1 shows that the share of income accruing to households belonging to the richest decile is estimated at 50% on average in 2019 with values ranging from 37% (Algeria) to 65% (South Africa). As a point of comparison, the top10 share in the US is estimated at 46.8% and that of France at 32.4%.

Another measure of inequality is the share of regional income earned by the top 10% of African households. This share was estimated at 54% by Chancel et al.<sup>4</sup> who also highlighted that, compared

In Africa, the average within-country share of income accruing to the top 10% is estimated at 50% in 2019

to Europe, BRICS countries, and the Middle East, the ratio of average Top 10% income to Bottom 50% income in Africa was the highest (Panel B of Figure 2). This is another striking indication that inequality levels in the African region are extremely high.

#### The deep roots of African inequality?

Figure 3 shows the map of top 10 shares across African countries in 2019 using data from the 2020 WID regional update (Anne-Sophie Robilliard. "2020 WID.world Update for countries of the Africa region". 2020). The picture shows a clear North-South gradient of increasing inequality. This is consistent with contemporary African inequality levels reflecting both the situation at Independence (Giovanni Andrea Cornia. "Sub-Saharan Africa's Diverging Inequality Trends, 1991-2011: A Structuralist Interpretation". In: *Revue d'économie du développement* 27(2) [2019], pp. 9–43) and the political economy and institutions that followed.

High levels of inequality are found in countries that experienced white settlers' colonization, a type of colonization that produced very high land concentration – through discriminatory laws of access to land – as well as low rural wages – through mobility restrictions. At the southern tip of the continent, unsurprisingly, South Africa exhibits an extremely high level of income inequality: in 2019, the income share of top 10% households is estimated at  $65.1\%^5$ .

While South Africa achieved official independence from European colonial powers in 1910, it was obtained for the benefit of a small group of white settlers (the Boers) who took power and, through apartheid, maintained the

South Africa is the most unequal country of the region: in 2019, the income share of top 10% households is estimated at 65.1%

high concentration of land and assets. Apartheid in South Africa came to an end in 1994 and left a population with dramatic income inequalities across racial groups (Johannes Hoogeveen and Berk Ozler. "Not Separate, Not Equal: Poverty and Inequality in Post-Apartheid South Africa". 2005). Since then, there

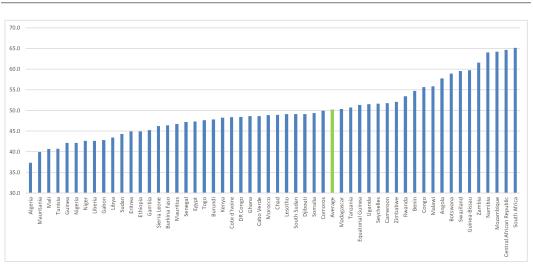
<sup>&</sup>lt;sup>1</sup>Lucas Chancel et al. "How Large Are African Inequalities? Towards Distributional National Accounts in Africa". 2019.

<sup>&</sup>lt;sup>2</sup>The new survey-data points are for the following country-years: Angola 2018, Botswana 2015, Cape Verde 2015, Djibouti 2017, Egypt 2017, Ghana 2016, Lesotho 2017, Liberia 2016, Malawi 2016, Mauritius 2017, Nigeria 2017, Rwanda 2016, Sierra Leone 2018, Swaziland 2016, Sudan 2014, Tanzania 2017, Tunisia 2015, Zimbabwe 2017

<sup>&</sup>lt;sup>3</sup>As detailed in Robilliard (Anne-Sophie Robilliard. "2020 WID.world Update for countries of the Africa region". 2020) and Chancel and Piketty, (Lucas Chancel and Thomas Piketty. "Countries with Regional Imputations on WID.world: A Precautionary Note". 2020) the 2019 inequality estimates rely on the straightforward extrapolation of income distribution obtained using the adjustment of the latest survey data available in each country.

<sup>&</sup>lt;sup>4</sup>Chancel et al., "How Large Are African Inequalities? Towards Distributional National Accounts in Africa".

<sup>&</sup>lt;sup>5</sup>Note that this estimation relies on different methods and some degree of extrapolation. For more details, see Alvaredo and Atkinson, (Facundo Alvaredo and Anthony B Atkinson. "Colonial Rule, Apartheid and Natural Resources: Top Incomes in South Africa, 1903-2007". In: [2010]) Chancel et al. (Chancel et al., "How Large Are African In-equalities? Towards Distributional National Accounts in Africa") and Robilliard. (Robilliard, "2020 WID.world Update for countries of the Africa region") A significant research effort by Leo Czajka and Amory Gethin is currently underway to update the work by Alvaredo and Atkinson (Alvaredo and Atkinson, "Colonial Rule, Apartheid and Natural Resources: Top Incomes in South Africa, 1903-2007") and produce recent and accurate distributional national accounts for South Africa.



#### Figure 1. Top 10% income shares across African countries in 2019

*Source*: World Inequality Database 2020 Update. Note: These estimates are obtained using different methods and some degree of extrapolation. See Robilliard<sup>*a*</sup> for more details.

has been a significant increase of social transfers, in particular through the expansion of old-age support (Anne Case and Angus Deaton. "Large cash transfers to the elderly in South Africa". In: *The Economic Journal* 108(450) [1998], pp. 1330–1361). However, wealth inequality, which reflects the distribution of land and physical capital, has remained at very high levels (Anna Orthofer. "Wealth inequality in South Africa: Evidence from survey and tax data. Research project on employment, income distribution and inclusive growth". 2016).

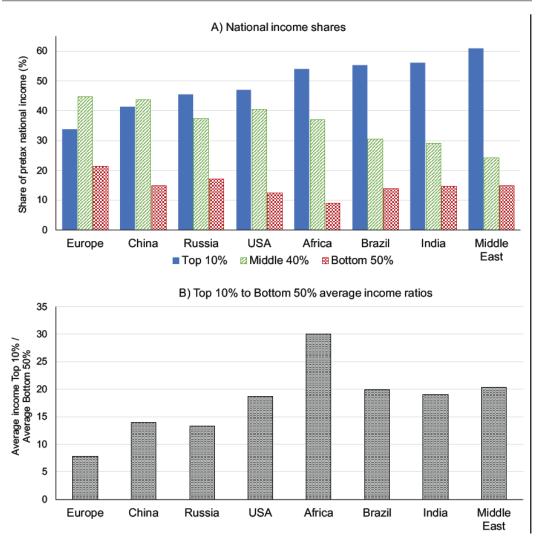
White settlers colonization and its institutional spinoffs also shaped high levels of inequality in other countries of the Southern Africa region<sup>6</sup>: outside of South Africa, top10 shares vary between 49% for Lesotho and 64% for Namibia, a country that remained under South African rule until 1990. This confirms that conditions at the time of independence have a long-lasting impact and illustrates one important detrimental effect of colonization in particular when discriminatory institutions – such as laws of access to land and restrictions to mobility – are not only set up (Leander Heldring and James A. Robinson. "Colonialism and economic development in Africa". 2012) but also maintained. Indeed, the resulting inequality of resources in turn leads to the development of institutions "geared toward protecting the interests of the elites" (Lennart Erickson and Dietrich Vollrath. "Dimensions of land inequality and economic development". 2004).

Compared to its neighboring countries, inequality, though high, appears relatively lower in Zimbabwe. The country, who gained independence in 1980 and inherited from an extremely unequal distribution of land, set up a land-reform in 2002 which effectively redistributed land from white-owned farms and estates to either landless and poor farmers, or to new black commercial farmers. As a result of the land reform, the number of large capitalist farms fell by around 75%, while there was a 16% drop in the number of large foreign and domestically owned agro-estates (Sam Moyo. "Land concentration and accumulation after redistributive reform in post-settler Zimbabwe". In: *Review of African Political Economy* 38:128 (2011), pp. 257–276). This significant

<sup>&</sup>lt;sup>a</sup>Anne-Sophie Robilliard. "2020 WID.world Update for countries of the Africa region". 2020.

<sup>&</sup>lt;sup>6</sup>Botswana, Lesotho, Namibia, South Africa, and Swaziland.

#### Figure 2. Inequality levels across world regions, 2017



*Source*: Lucas Chancel et al. "How Large Are African Inequalities? Towards Distributional National Accounts in Africa". 2019.

redistribution of assets is a credible explanation for relatively lower inequality.

Relatively high levels of inequality are found in Angola, Zambia and Mozambique, close neighbors to the southern Africa region and former settlers' colonies. Angola and Mozambique were late autonomous states as they gained independence from Portuguese rule in 1975 only.

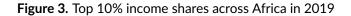
At the other end of the continent, countries of North-

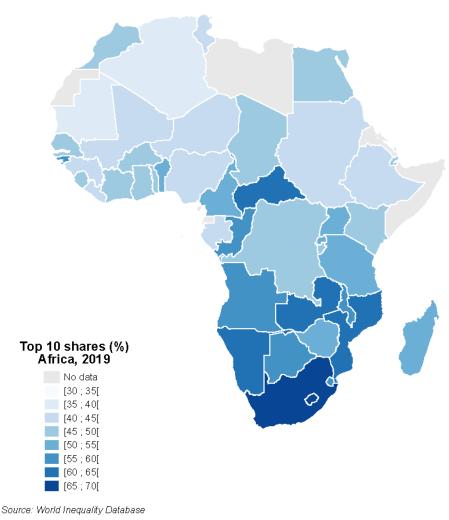
Northern Africa exhibits relatively moderate levels of income inequality: 43,9% of the ern Africa<sup>7</sup> exhibit relatively lower levels of income inequality: there, the top10 share is estimated at 43.9% on average and ranges from 37% in Algeria to 49% in South Sudan. In Egypt, one

of the biggest African states, the top10 share is estimated at 43.4%, a high level by OECD standards, but much lower than South Africa. While Northern African

<sup>7</sup>Algeria, Egypt, Libya, Morocco, Sudan, South Sudan, and Tunisia.

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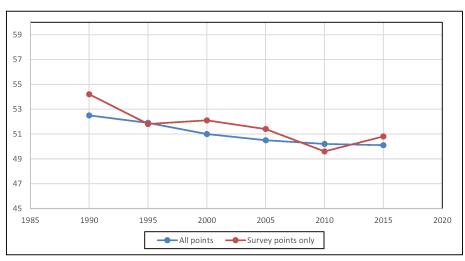
*Source*:World Inequality Database 2020 Update. Note: These estimates are obtained using different methods and some degree of extrapolation. See Robilliard<sup>*a*</sup> for more details.

<sup>a</sup>Anne-Sophie Robilliard. "2020 WID.world Update for countries of the Africa region". 2020.

countries also experienced a settlers type of European colonization, some gained independence earlier than other Sub-Saharan countries. In Egypt, independence from the UK was gained in 1922. More importantly, following independence, many Northern African countries embraced some form of Arab socialism that maintained a state-controlled socialist economy (Nasser in Egypt, Bourguiba in Tunisia, Ben Bella and Boumédienne in Algeria). Instead, the neighboring Kingdom of Morocco remained under monarchical government which could explain a relatively higher level of inequality today.

Regarding Algerian inequality, which appears very low by regional standards, we should stress that the lack of transparency and recent data makes it difficult to properly evaluate its evolution over the last decade. Indeed, the last survey data available dates back from 2011. Going further back in time, inequality seems to have decreased since the 1990s. However, at this stage, we lack elements to explain this evolution. In addition, the

#### Figure 4. Average top10 shares in Africa over time (average of country levels)



*Source*: World Inequality Database 2020 Update. Note: The "All points" series includes interpolation between survey years, extrapolation after the last available survey and imputation for countries with no survey data. See Robilliard<sup>*a*</sup> for more details.

<sup>a</sup>Anne-Sophie Robilliard. "2020 WID.world Update for countries of the Africa region". 2020.

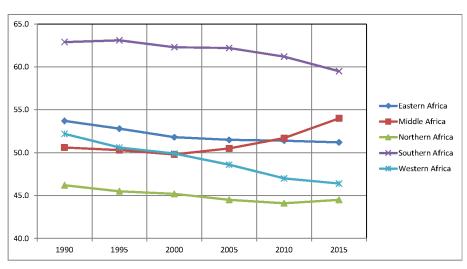


Figure 5. Average top10 shares by sub region over time (average of country levels)

*Source*: World Inequality Database 2020 Update. Note: World Inequality Database 2020 Update, "All points" series. These estimates are obtained using different methods and some degree of extrapolation. See Robilliard<sup>*a*</sup> for more details.

<sup>a</sup>Anne-Sophie Robilliard. "2020 WID.world Update for countries of the Africa region". 2020.

fact that income gaps are less extreme than in other countries does not in itself guarantee their social, eco-

nomic and political legitimacy. It is however interesting to contrast the trajectories of Algeria and South

Africa, both settlers colonies with very high levels of inequality in the early XXst century (Denis Cogneau, Yannick Dupraz, and Sandrine Mesplé-Somps. "Fiscal capacity and dualism in colonial states: The French empire 1830-1962". In: *The Journal of Economic History* (2019) ; Facundo Alvaredo and Anthony B Atkinson. "Colonial Rule, Apartheid and Natural Resources: Top Incomes in South Africa, 1903-2007". In: (2010)). While inequality remains very high in South Africa - where apartheid maintained the high inequality levels of the settlers colonial system until the mid-1990s - it is much lower in Algeria, a fact that is consistent with both the dismantling of the colonial system in the 1960s and the economic and social policies promoted by the state-controlled socialist system that followed.

Intermediate levels of inequality – but high by international standards - are found in between the Northern and Southern African regions. Average levels of top10 shares vary from 46.7% for countries of the Western Africa region<sup>8</sup> to 54.4% for those of the Middle Africa region<sup>9</sup>. Eastern African countries<sup>10</sup> stand in between with an average top10 share of 51.2%.

In the Middle Africa region, the relatively high level of inequality is driven mainly by the Central African Republic where the top10 share is estimated at 64.6%, very close to the levels estimated in South African and Namibia. This high level remains to be explained as the Central African Republic did neither experience settlers colonization nor a discriminatory system like apartheid after gaining Independence in 1960.

#### How has inequality evolved over time?

Considering the last three decades, available data suggests that within-country inequality has changed very little in the Africa region. More specifically, as shown in Figure 4, data from the early 90s indicates that the average top10 share was around 52% and went down to 50% in the late 2010s, a 2% decrease that is probably smaller than the confidence interval of our estimates.

Figure 5 shows however that dynamics at the sub regional level are contrasted, with average country-level inequality decreasing over time in Southern and Western Africa, and increasing in Middle Africa. Countries of Eastern and Northern Africa experienced little change on average. Investigating the determinants of these contrasted trends is left for future work. Likely suspects are the dynamics of the skill premium, the increase in direct taxation and transfers, the evolution of commodity prices, etc.

### What next?

More and better data is needed to establish the findings reported in this brief more firmly and to investigate the determinants of differential levels and trends across countries. While the availability of household survey data has increased significantly in the last decades, quality and comparability remain an issue, particularly when it comes to inequality measurement. The methods developed at the World Inequality Lab seek to increase the level of comparability of inequality estimates. They remain imperfect because most African countries still do not publish any tax statistics. And yet recent developments show that progress can be made. Over the past few years, the WIL was able to access administrative or tax data in some countries (Ivory Coast, South Africa, Senegal, Tunisia) and is investigating others (Morocco, Egypt). Investing in statistical capacity and transparency is paramount in order to assess the impact of economic policies in Africa.

<sup>&</sup>lt;sup>8</sup>Benin, Burkina Faso, Cabo Verde, Cote d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, and Togo.

<sup>&</sup>lt;sup>9</sup>Angola, Cameroon, Central African Republic, Chad, Congo, DR Congo, Equatorial Guinea, Gabon, and Sao Tome and Principe.

<sup>&</sup>lt;sup>10</sup>Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Seychelles, Somalia, Tanzania, Uganda, Zambia, and Zimbabwe.

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#### The World Inequality Lab

The World Inequality Lab aims to promote research on global inequality dynamics. Its core missions are the extension of the World Inequality Database, the production of inequality reports and working papers addressing substantive and methodological issues, and their dissemination in academic and public debates. 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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