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INCOME INEQUALITY IN AFRICA¹



Africa and Latin America are the most unequal continents, as far as income distribution is concerned.



High levels of income inequality act against poverty reduction through accelerated economic growth adversely impacting the cohesion of African societies.



There has been **no significant decline in within-country inequality** in Africa since 2000 at the continental level, though the decline can be observed among the richest African countries, which are also the most unequal.



In contrast, one can observe a **significant decline in between-country inequality**: in Africa, poor countries have systematically grown faster, in per capita terms, than richer ones since 2000.



The **combination of these two trends suggests a decline in income inequality** among African citizens, at least until the COVID-19 crisis.



Investing in projects **demanding assets owned by poorest households, unskilled labor notably**, will complement efforts to increase the human capital of poorest households to eventually reduce within-country income inequality. Accelerated implementation of the Africa Continental Free Trade Area should also contribute to further reduce between-country inequality.

With accelerated per capita GDP growth, poverty rates have dropped in most African countries, and on the continent altogether since the beginning of the millennium, but the contribution of reduced inequality to that trend remains uncertain. Africa experienced a significant decline in aggregate head count poverty rate from 48% in 2000 to 34% in 2019.² Yet, this decline in the proportion of poor in total population was insufficient to contain the growth in the absolute number of poor (+57 million) given the rapid population growth (+505 million people) between 2000 and 2019.³ As a result, Africa was in 2019 home to 27 of the world's 28 poorest countries and had more extremely poor people (433 million) than the rest of the world combined. On top of a rapid population growth, high levels of income

inequality may have contributed to lessen the impact of economic growth on poverty reduction,⁴ should its fruits be concentrated among the wealthier. **However, the magnitude and evolution of income inequality in Africa, within and between countries, remain uncertain, and it is the aim of this note to unpack some of its aspects.**

A consequence of inequity, income inequality affects GDP growth and the cohesion of African societies. World Bank (World Development Report, 2006) emphasizes the logical link between inequity — the inequality of opportunities, and economic growth: inequity prevents some economic agents, whether individuals or firms, from fully expressing their economic potential, thus reducing

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² Source: Authors' computations based on World Bank Povcalnet. Poverty is measured at PPP US\$1.9 a day.

³ The situation further deteriorated with the recession created by the COVID crisis, with an estimated number of poor at 514 million by 2021 (Source: United Nations Economic Commission for Africa, 2021).

⁴ See Bourguignon (2004) for a discussion on how GDP growth and income inequality determine poverty.

economic efficiency and slowing down growth. At the same time, inequity feeds, along with other factors, into income inequality.⁵ Inequity, which is thus responsible for both slow growth and high inequality, is most likely the consequence of elite's capture (Bourguignon and Dessus, 2009). And such capture is getting increasingly contested in Africa. In the last two decades, localized conflicts, mass demonstrations and protests have significantly increased across the continent, while interstate and civil wars decreased. Root cause beyond this trend is the lost trust that citizens have in states to protect them, render justice and deliver services to them, but also the increased perception of states' failure to offer citizens equal economic opportunities. As a matter of fact, evidence shows that there are more protests in countries with increasing income inequality, and fewer protests in countries where inequality is being reduced.⁶ The rapid urbanization of the continent, its ongoing digitalization and integration augment the capacity of African citizens to compare themselves with others, and thus their perceptions of inequality and inequity.

Measuring income inequality within countries and at the continental level remains a challenge. While consumption surveys are generally considered reliable to measure the consumption of the poor and vulnerable households (and are being conducted in most African countries), they tend to systematically underestimate the consumption of the richest (sampling and measurement issues).⁷ Besides, inequality measured by consumption underestimates inequality measured by income, as savings are typically larger among richest households. Furthermore, given lack of comparabil-

ity of surveys across countries, computing inequality at the continental level (as if Africa was a single country) brings additional complexity. Efforts are ongoing to harmonize surveys across countries, but there are still many methodological issues preventing the comparison and aggregation of income/consumption distributions across African countries.⁸ **Thus, we take the approach of discussing separately the evolutions of between-country and within-country inequality, to get a reliable sense of the evolution of income inequality between African citizens.**

WITHIN-COUNTRY INEQUALITY

Income inequality in Africa, when measured using the (population weighted) average share of revenue accruing to the richest 20 percent of the population, was the highest across all continents in 2015. Such a metric only captures average within-country inequality and does not consider between-country inequality. In 2015, Africa recorded the highest proportion of income accruing to the top 20% of the population (Q5, 55.2%), and the second lowest proportion of income accruing to the bottom 40% of the population (Q1+Q2, 13.8%) after Latin and Central America (12.6%).

Other measures confirm the relatively high level of within-country inequality in Africa, compared with developing countries of other continents. At almost 42.7, Africa's population weighted average Gini coefficient⁹ ranked in 2015 second after developing economies in Central and Latin America (48.0), but before those in Asia (38.6), and Europe (30.3), see Table 2.

Table 1: Proportion of income accruing to various quintiles

Quintiles - poorest to richest	Q1	Q2	Q3	Q4	Q5
Africa (33 countries; 81%)	4.8	9.0	12.8	19.3	55.2
Latin and Central America (12 countries; 63%)	4.1	8.5	13.3	20.4	53.7
Europe (9 countries; 93%)	7.4	12.2	16.7	22.8	40.9
Asia (9 countries; 49%)	6.4	11.4	16.1	22.7	43.5

Source: Authors' calculations based on World Inequality database and World Development Indicators (World Bank). In brackets is the proportion of the continent's developing economies population covered in the computations for the year 2015.

⁵ Other factors may include economic transformation, that may induce temporary increases in inequality, and fiscal redistribution.

⁶ Ortiz et al. (2021).

⁷ In Sub Saharan Africa, 101 consumption surveys were conducted in the decade 2010-19 (that is, one every 5 years on average in each of the 47 countries), and less than in the previous decade 2000-9, during which 154 surveys were conducted. This average nonetheless conceals important disparities in the frequency at which countries conduct surveys.

⁸ Different periods/methods for data collection, sampling, welfare indicators, and purchasing power parity measurement difficulties. See Chancel et al. (2019) for an attempt to compute inequality at the regional level for Sub Saharan Africa.

⁹ The Gini coefficient ranges between 0 (perfect income equality between all citizens) and 100 (perfect income inequality – with one citizen concentrating all country's incomes).

Table 2: Population weighted Gini for different continents

	2000	2005	2010	2015
Africa (34 countries; 81%)	43.9	43.6	43.7	42.7
Latin and Central America (12 countries; 63%)	54.1	51.7	49.0	48.0
Europe (9 countries; 93%)	35.2	34.9	32.0	30.3
Asia (9 countries; 49%)	37.1	39.1	41.0	38.6

Source: Authors' calculations based on World Inequality database and World Development Indicators (World Bank). In brackets is the proportion of the continent's developing economies population covered in the computations for the year 2015.

At the Africa continental level, the decline in within-country inequality was modest after 2000. While the share of the population in Africa covered by regular household surveys between 2000 and 2015 (81%) is the highest among developing economies grouped by continents, the decline in weighted average Gini, of about 1.2 percentage point over the period, is too small to be statistically significant, given typical intervals of confidence applied to such surveys. Stagnation in Africa contrasts sharply with the strong decline observed in Latin and Central America (-6.1 percentage points), possibly due to the implementation of strong redistribution policies, as in Brazil, see Table 2.

This insignificant decline at the Africa continental level nonetheless masks significant differences between subgroups of African countries.¹⁰ If one cannot observe any strong within-country inequality dynamics within the poorest countries of Africa, one can observe a significant decline in within-country inequality within the richest countries in Africa, from 45.8 in 2000 to

43.3 in 2015, see Table 3. From a geographical standpoint, a significant decline in within-country inequality can be observed in Western and Central Africa (including Maghreb) between 2000 and 2015. In contrast, the average Gini coefficient in Eastern (including Egypt and the horn of Africa) and Southern Africa, starting from a higher level, remained stubbornly high over the period.

Demographics did not play a major role in the aggregate evolution of within-country inequality, despite significant differences in population growth rates across countries: keeping population weights unchanged at their 2000 levels bring down Africa's population weighted average Gini coefficient to 42.9 in 2015, instead of 42.7 with contemporaneous population data. The overall decline in Africa can thus only be very partially attributed to the faster population growth in less unequal countries.

Table 3: Population weighted Gini for different African countries groupings

	2000	2005	2010	2015
Poorest African countries*	42.0	42.2	42.1	42.2
Richest African countries*	45.8	45.1	45.5	43.3
Western and Central Africa**	43.1	42.4	42.0	39.1
Eastern and Southern Africa**	44.5	44.6	45.0	45.6

Notes: (*) Poorest African countries include countries below the median per capita income (population weighted) recorded in 2000 (in PPP terms). (**) Western and Central Africa includes Maghreb, ECOWAS and CEMAC countries. Eastern and Southern Africa includes all other African countries.

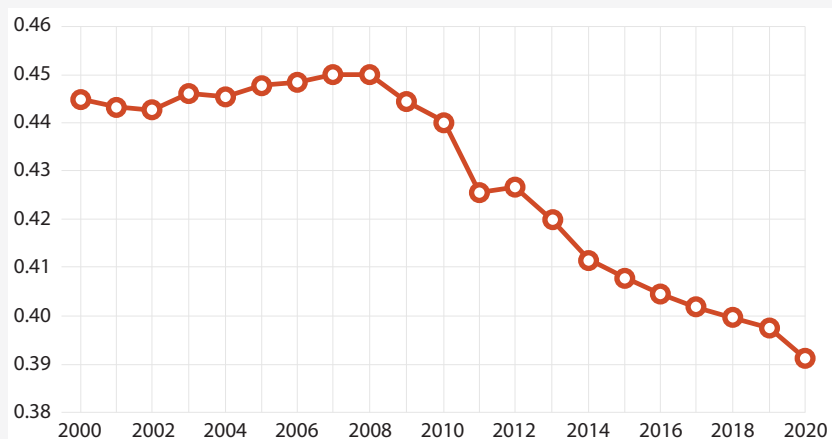
¹⁰ Measures of inequality – of vertical nature, that is, between individuals – discussed in this paper, are also unable to reflect the evolution of horizontal inequality, which refers to inequality between segments of the population to which citizens can associate themselves, such as tribal or regional groupings for instance.

BETWEEN-COUNTRY INEQUALITY

The other facet of income inequality between African citizens is that of inequality between countries. This dimension is getting increased attention as the continent has been deploying accelerated efforts to integrate economically, through the reduction of trade barriers, the opening of labor markets to foreigners, and the development of regional value chains.¹¹ As such, it could impact the distribution of average incomes across countries in a variety of ways.

Between-country income inequality culminated in 2008 and has receded since. One way to observe this trend is to compute Gini coefficients between countries. In doing this, we assume that all citizens from the same country have the same income (i.e., that there is absolutely no within-country inequality). The computation accounts for the respective population size of each country, and income per capita is measured in purchasing power parity (PPP) terms to reflect real differences in citizens' welfare. While between-country inequality rose in the first decade of the millennium (prolonging a trend observed since 1990), it peaked in 2008 and significantly declined afterwards.

Chart1 – The evolution of between-country inequality in Africa since 2000: Gini coefficients



Source: Authors' calculations based on World Development Indicators (World Bank). Based on 49 African countries (out of 54, representing 98% of Africa's population in 2020) for which data is available throughout the full period 2000-20.

Another way to observe this trend is to assess whether one can observe a process of income convergence between countries. It consists in estimating the impact of countries initial per capita income levels, as measured in PPP, on their future economic growth, the so-called process of unconditional convergence frequently used in the empirical growth literature.¹² A large negative impact of initial income levels on growth would mean that poorer countries have systematically grown faster than richer countries, thus reducing between-country inequality. This process can be observed between African countries since 2000. Chart 2 reports the estimated annual per capita growth differential between 2 African countries, one being twice richer than the other in a given year, over the remaining of the period until 2019. For instance, a country twice poorer than another in 2008 grew annually 1.2 percentage points faster than the other 2008-19.¹³ By 2019, the richer country was only 1.8 times richer than the poorer one. Results suggest that initial differences in income significantly contributed (from a statistical perspective) to the determination of countries' future growth rates. This effect culminated in 2008, before lessening afterwards. Seen from a continental perspective, this process of unconditional income convergence has significantly contributed to

reducing inequalities between African citizens. In alignment with findings from Chancel et al. (2022),¹⁴ it suggests that within-country inequality, as opposed to between country inequality, is increasingly contributing, in relative terms, to income inequality between African citizens.

Distinguishing between resource rich and resource poor countries provides additional insights on this observed process of convergence. Commodities are important drivers of GDP growth in many African countries and it thus legitimate to understand their impact on the observed convergence process. Indeed, a strong influence of commodity prices on this process could actually mean that some of the factors that

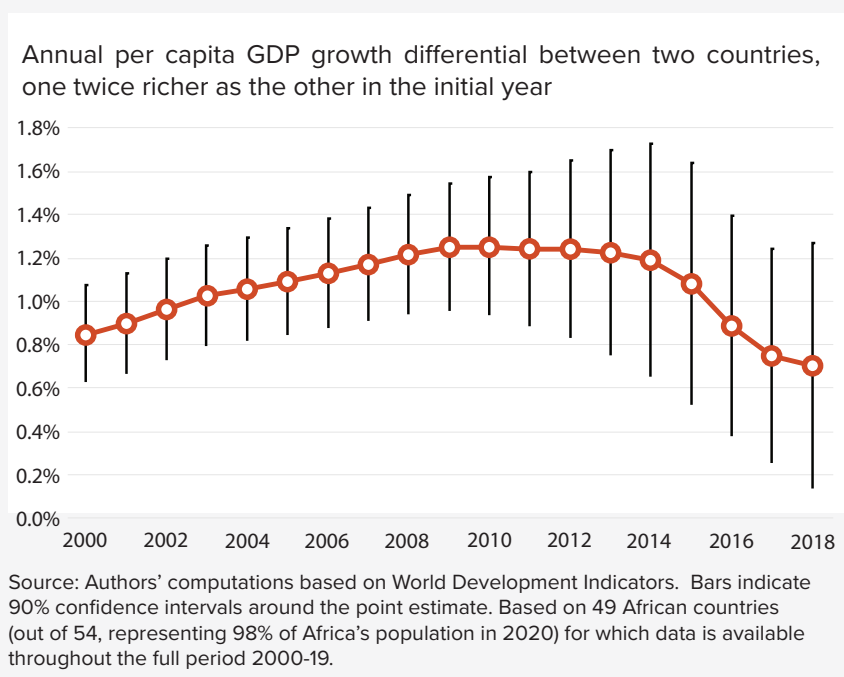
¹¹ In 2019, intra-regional trade in Africa was around \$61 billion, or 18% of the region's total imports - double the share 20 years ago. Trade within Africa is more diverse than that with the rest of the world and consists more of higher value-added products. Growth in trade happens within regional economic communities (RECs), as 75% of intraregional trade in Africa took place within the five major RECs in 2017. The recently ratified landmark African Continental Free Trade Area (AfCFTA) aims to promote further integration among African countries.

¹² Bhorat et al, (2017) and Patel et al, (2021). Unconditional convergence stems from a theoretical standpoint from the existence of diminishing returns to scale. The integration of factors and goods markets encourages in such circumstances the convergence of incomes between countries.

¹³ The estimation method accounts for difference in population sizes across countries. In other words, largely populated countries get more weights in the determination of results than smaller ones. See Petrakos and Arterlaris (2009) and Roy et al. (2016) for similar approaches.

¹⁴ Chancel et al. (2022) suggest that the relative contribution of between-country inequality (across all countries in the world) to total inequality declined from 57% in 1980 to 32% in 2020.

Chart 2 – The evolution of between-country inequality in Africa: unconditional convergence



theoretically predict such convergence may have had little influence. These include in particular the faster accumulation of capital in poorer countries and a catch up in technology. We test this assumption by allowing the speed of convergence to differ between resource rich and resource poor countries in our estimates.¹⁵ Results suggest the following: (i) one cannot observe any difference in the speed of convergence between resource rich and resource poor countries before 2009; (ii) the process of convergence was slightly faster for resource rich countries from 2009, adding for on average 0.2% percentage points of annual growth to the differential between a country and another twice richer; (iii) the statistical distinction between resource rich and poor countries also allows to observe a faster convergence for poor countries from 2009 onwards. In other words, while commodities developments may explain a small but significant portion of the convergence process between African countries since 2009, their consideration actually reinforce the overall observation of a robust, and likely endogenous, process of unconditional convergence leading to a decline in between-country inequality over the last two decades.

¹⁵ Resource rich countries are defined as countries with a ratio of total natural resources rents over GDP averaging more than 10% between 2000 and 2019 (Source: World Development Indicators).

¹⁶ [Bottan et al. \(2020\)](#).

¹⁷ COMESA (2020) and IFC (2020) for further discussions.

GOING FORWARD

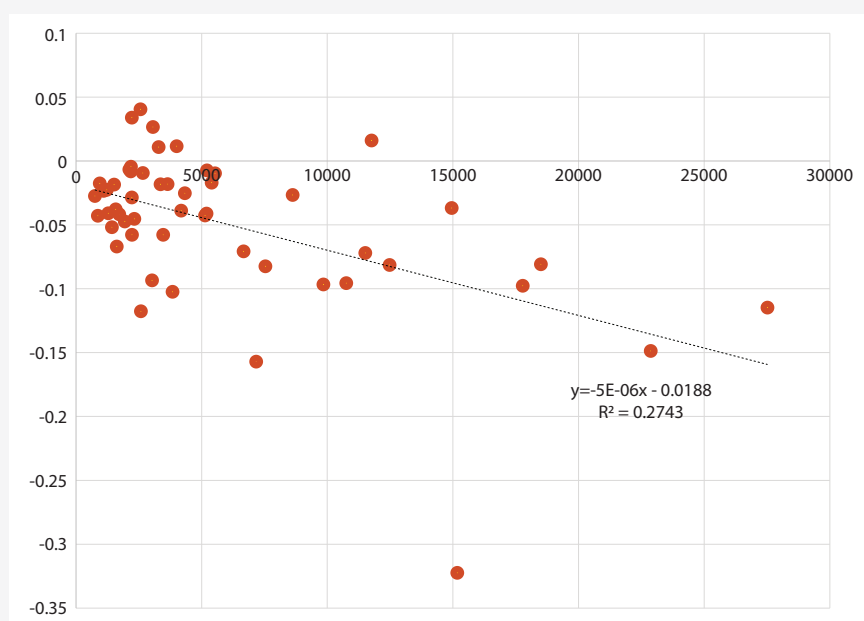
It is very likely that the COVID crisis has exacerbated within-country inequalities. Recent studies suggest that COVID-19 – which entailed the largest recession ever recorded on the African continent – disproportionately affected the bottom 40% in Africa due to its adverse health and economic impacts.¹⁶ Households at the bottom of the distribution curve have had less access to health resources to protect themselves against the virus and get cured. But maybe more importantly, there is growing empirical evidence to suggest that micro, small, and medium-sized enterprises (MSMEs) and self-employment activities – from which most poor derive their labor income in Africa, were disproportionately affected by the crisis, as unable to benefit from public support (e.g., employment insurance, liquidity support to formal and financially included firms) and to develop alternative business models (e.g., digital solutions).¹⁷

In contrast, evidence on between-country inequality suggests that poor countries better weathered the crisis. In 2020, the Gini coefficient between African countries continued to decline to 39.1, down from 39.7 in 2019. Also, the observation of per capita income growth rates between 2019 and 2020 against initial per capita income (measured in PPP) in 2019 suggests that richer countries saw their per capita incomes contracting more severely than poorer ones, see Chart 3.

The determinants of income inequality are multi-dimensional and complex. It is beyond the scope of this note to discuss the economic determinants of within-country and between-country inequality. It is nonetheless safe to say that economic systems promoting the use of assets (skills, land, financial capital, etc.) most owned by poorest households and the provision of goods and services most consumed by poorest households is likely to reduce income inequality. In contrast promoting the use of assets concentrated

among a few is likely to further exacerbate inequality. Highly dualistic economic structures, with limited formal employment of the labor elite in the government, multinational companies and the resource sector, whereas the majority of labor earns much lower incomes in the informal or subsistence sector; high concentrations of physical capital, human capital and land, in certain groups or regions; and the limited redistributive capacity of the State, which may furthermore be biased towards selected influential groups (urban dwellers, ethnic groups etc.) are structural patterns often associated to inequality. Global and regional integration, as it allows better allocative efficiency (of factors of production, including technologies) across countries and the mobilization of economies of scale in poorer countries (through access to larger markets) is often seen to reduce between countries inequality. In 2020, however, some of the most international integrated African economies suffered from their exposure to key global value chains (e.g., tourism) that were particularly affected by the COVID crisis.

Chart 3 – Per capita growth rates in 2020 against per capita incomes in 2019



Source: Authors' computations based on World Development Indicators. Based on 52 African countries (out of 54, representing 97% of Africa's population in 2020) for which data is available for 2019 and 2020.

Creating more private-sector income opportunities for the bottom 40 percent in Africa will be key to reduce inequalities and sustain an inclusive recovery. This will call for devoting particular attention to supporting entrepreneurship, further promoting financial inclusion, and accelerating reforms to foster domestic competition which has been damaged by the crisis, leveraging opportunities stemming from emerging new potential growth and jobs creation drivers in Africa, including urbanization, digitalization and regional integration -- the latter, notably through the implementation of the Africa Continental Free Trade Area, potentially acting as a major reducer of inequality between the citizens of different African countries.

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