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Nigeria: Gender Inequality and National Wealth

Quentin Wodon

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Background: This brief was prepared for a KIX Africa 19 Hub national policy dialogue in Nigeria with a focus on data and achieving gender equality in and through education. KIX (Knowledge and Innovation Exchange) Africa 19 contributes to education systems strengthening in African anglophone countries by bridging the gap between research and policy making. With support from the Global Partnership for Education and Canada's International Development Research Center, KIX Africa 19 is managed by UNESCO IICBA.

Key findings: Using data from the World Bank on the changing wealth of nations, this brief provides estimates of gender inequality in human capital wealth as the largest component of Nigeria's national wealth.

- A country's wealth is the assets base that enables it to produce future income (GDP). It mainly consists of produced capital, natural capital, and human capital wealth defined as the present value of the future earnings of the labor force.
- In Nigeria as in most other countries, human capital wealth is the largest component of national wealth, accounting for two thirds of national wealth in 2018.
- While national wealth has increased since 2010, it has not increased enough to compensate for population growth, leading to a decline in per capita wealth from $31,067 in 2010 to $28,622 in 2018 (a loss of -7.9 percent from the base).
- Gender inequality reduces women's expected earnings and therefore their human capital wealth. In Nigeria, women's human capital wealth is at only 35.7 percent of the value for men (women are expected to earn only slightly more than one third of what men are expected to earn). Said differently, while women account for half of the adult population, they account for just over a fourth of human capital wealth.
- Gender inequality also contributes to a lack of educational attainment for girls and a high prevalence of child marriage and early childbearing. This leads to high fertility rates and high population growth, reducing per capita national wealth and preventing Nigeria from reaping the benefits of the demographic dividend.

A country's wealth mainly consists of three types of capital: (1) Produced capital comes from investments in assets such as factories, equipment, or infrastructure; (2) Natural capital consists of assets such as agricultural land and both renewable and nonrenewable natural resources; (3) Human capital is measured as the present value of the future earnings of the labor force. Also included in national wealth are net foreign assets, a much smaller yet possibly negative component of wealth. By far the largest component of most countries' wealth is human capital or people. In Nigeria, human capital wealth accounts for two thirds of national wealth. However, substantial human capital wealth is lost due to gender inequality in earnings, with gender inequality also affecting levels of wealth per capita. This brief provides estimates of gender inequality in human capital wealth in Nigeria.

National wealth is not increasing fast enough to compensate for population growth

Estimates of the changing wealth of nations are produced every few years by the World Bank. Apart from produced and natural capital, the last two editions of the report include estimates of human capital wealth defined as the present value of the future earnings of the current labor force (Lange et al., 2018; World Bank, 2021). Table 1 provides estimates of Nigeria's wealth from 2010 to 2018 based on the latest data release. National wealth stood at $5.6 trillion in 2018. This represented an increase in real terms of 13.9 percent versus 2010 (average cumulative

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annual growth rate of 1.6 percent per year). Human capital wealth stood at $3.7 trillion, an increase of 24.8 percent since 2010. It accounted for 66.3 percent of national wealth. Produced capital reached $1.1 trillion in 2018, with a substantial increase over the decade, accounting for a fifth of national wealth. Natural capital was at $0.8 trillion in 2018, a level below that observed earlier. In absolute terms, most of the loss in natural capital came from non-renewable resources. This could relate to fluctuations in oil prices (estimates of non-renewable natural capital depend on the level of exploitation of the resources and their market price, so that fluctuations in commodity markets affect values).

Table 1: Estimates of Nigeria's National Wealth, 2010-2018 (million US$)

Millions, constant 2018 US$	2010 (1)	2015	2018 (2)	% change [(2)-(1)]/(1)
National wealth	4,924,107	5,813,881	5,606,161	13.9%
Produced capital	762,549	990,307	1,129,061	48.1%
Human capital	2,978,506	3,661,975	3,717,051	24.8%
Natural capital	1,190,965	1,195,305	842,582	-29.3%
Renewable	407,773	321,692	260,143	-36.2%
Non-renewables	783,192	873,613	582,438	-25.6%
Net foreign assets	-7,913	-33,706	-82,532	943.0%
Population (millions)	158.5	181.1	195.87	23.6%
Shares of national wealth				
Produced capital	15.5%	17.0%	20.1%	-
Human capital	60.5%	63.0%	66.3%	-
Natural capital	24.2%	20.6%	15.0%	-
Net foreign assets	-0.2%	-0.6%	-1.5%	-

Source: Based on data for World Bank (2021).
Note: Data are available on Nigeria's national wealth before 2010, but some estimates prior to 2010 seem problematic. For that reason, estimates are provided in this brief only from 2010 to 2018.

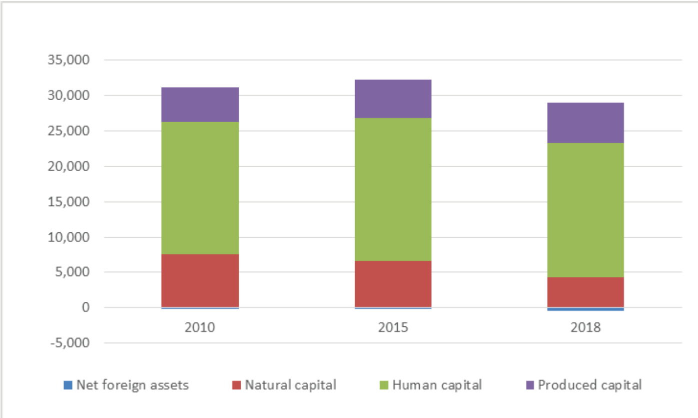
Table 2 provide estimates in per capita terms. While national wealth increased in absolute terms since 2010, per capita wealth decreased from $31,067 in 2010 to $28,622 in 2018. This represents a loss of 7.9 percent versus the baseline value in 2010 (Figure 1). The period from 2010 to 2018 was a time during which per capita GDP in current US$ also decreased slightly. There was a sharp gain in GDP per capita in the first few years of the decade, but a decline thereafter. The economic impact of the COVID-19 pandemic may have led to additional losses in human capital wealth since 2018, but estimates are not yet available. More generally, as will be discussed below, gender inequality contributes to high rates of population growth, which make it harder for Nigeria to generate gains in per capita wealth.

Table 2: Estimates of Nigeria's Per Capita Wealth, 2010-2018 (US$)

Constant 2018 US$	2010 (1)	2015	2018 (2)	% change [(2)-(1)]/(1)
Per capita wealth	31,067	32,103	28,622	-7.9%
Produced capital	4,811	5,468	5,764	19.8%
Human capital	18,792	20,221	18,977	1.0%
Natural capital	7,514	6,600	4,302	-42.8%
Renewable	2,573	1,776	1,328	-48.4%
Non-renewables	4,941	4,824	2,974	-39.8%
Net foreign assets	-50	-186	-421	744.0%

Source: Based on data for World Bank (2021).

Figure 1: Per Capita Wealth (US$)



Source: Based on data for World Bank (2021).

Gender inequality affects national and per capita wealth negatively

As gender inequality reduces women's expected earnings, it also reduces human capital wealth (see Wodon and de la Brière, 2018, and Wodon et al., 2020 for tentative estimates of the cost of gender inequality globally). Table 3 reproduces data for 2018 from the previous Tables and adds estimates of human capital wealth by gender (the methodology for measuring human capital wealth entails estimating future earnings for men and women).

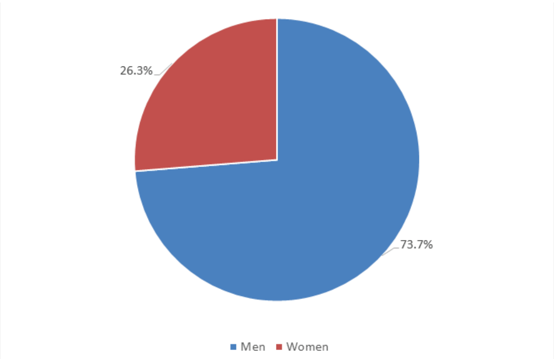
The estimates suggest that human capital wealth for women was at only 35.7 percent of the value for men in 2018 (US$ 1 trillion versus US$ 2.7 trillion). In other words, women are expected to earn only slightly more than one third of what men are expected to earn in the rest of their working life. Said differently, while women account for about half of the adult population, they account for only 26.3 percent of human capital wealth. If women were able to earn as much as men, human capital wealth (Figure 2) could increase dramatically, which would lead to a large increase in national wealth (estimating what the actual gains might be is complex if general equilibrium effects are accounted for). Other estimates of gender gaps in earnings in Nigeria have been published, including by the World Bank (2022). Those studies suggest smaller values for the gaps in earnings between men and women. This is in part because they focus on annual earnings for specific categories of workers, as opposed to earnings gaps for all women (including those not in the labor force) for a much longer period of time (the rest of individuals' working life). Still, even with other approaches, the literature suggests that gender inequality in earnings and income is high in Nigeria, and indeed higher than in most other sub-Saharan African countries (World Economic Forum, 2022).

Table 3: Estimates of Gender Inequality in Human Capital Wealth, 2018

	Total wealth (US$ millions)	Wealth per capita (US$)
Total wealth	5,606,161	28,622
Produced capital	1,129,061	5,764
Human capital	3,717,051	18,977
Men (1)	2,740,169	13,989
Women (2)	976,882	4,987
Difference (1)-(2)	1,763,287	9,002
Women's share (2)/ [(1))+(2)]	26.3%	26.3%
Natural capital	842,582	4,302
Net foreign assets	-82,532	-421

Source: Based on data for World Bank (2021).
Note: Estimates of gender shares in human capital wealth rely on household survey data. As surveys tend to be conducted only every few years, gender shares may not change for several years.

Figure 2: Shares of Human Capital Wealth, 2018



Source: Based on data for World Bank (2021).

Another aspect of gender inequality that affects Nigeria's development is the fact that lack of educational attainment for girls and a high prevalence of child marriage and early childbearing contribute to high fertility rates, which in turn contribute to high annual rates of population growth. Estimates in a separate brief in this series suggest that universal secondary education for girls, which could virtually eliminate child marriages, could lead to a reduction in fertility rates of about one fifth. Over time, this would reduce the annual rate of population growth, which stood at 2.4 percent in 2021 according to data from the World Development Indicators. Through lower fertility rates and a lower rate of population growth, reducing gender inequality would contribute to higher levels of wealth per capita over time, which would help to prevent the risk of a decline in wealth per capita as observed in Table 1 from 2010 to 2018. Ass discussed in other briefs in this series, lower fertility rates and other benefits from higher educational attainment for girls would also facilitate the emergence in Nigeria of a demographic dividend that could further raise standards of living.

Takeaways

According to World Bank data, human capital wealth, defined as the present value of the future earnings of today's labor force, accounts for two thirds of Nigeria's national wealth. Unfortunately, gender inequality reduces women's expected earnings and therefore their human capital wealth. Women's human capital wealth stood at only 35.7 percent of the corresponding value for men. If gender inequality in earnings were reduced, human capital wealth could increase substantially. In addition, gender inequality contributes to a lack of educational attainment for girls and a high prevalence of child marriage and early childbearing. This in turn leads to high fertility rates and high rates of population growth, which in turn lead to reductions in per capita national wealth and may prevent Nigeria from reaping the full benefits of the demographic dividend. From 2010 to 2018, while national wealth increased in absolute terms, per capita wealth declined due to population growth.

This brief does not focus on strategies to expand employment and earnings opportunities for women in Nigeria, but other briefs in the series will explore options including by (following the literature on this topic) (1) reducing the time spent by women in unpaid work and redistributing care responsibilities to increase the time they may be able to allocate in the labor market; (2) giving women more access to and control of productive assets, including land and credit; and (3) addressing market and institutional failures, including reforming laws and regulatory frameworks that constrain women's economic activities.

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