

Nigeria Inequality Report

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Executive Summary

Data

Two datasets on wealth and status distribution in Nigeria were analyzed: 2017 World Bank quintile and decile estimates of income, and 2013 USAID Demographic Health Survey (DHS) wealth factor scores.

Results

Nigeria has a largely risk acceptant population based on inequality and cross-cutting rural/urban, ethno-religious, and elite/common cleavages. The result is a population vulnerable to ambition, distrust, and grievance at all levels. These grievances are well-manipulated by elites in the country's main ethnic groups, the Hausa-Fulani, Yoruba, and Igbo. These cleavages threaten economic growth and political stability in Africa's most populous nation that has the continent's largest economy. Nigeria is also a major oil producer, making it an attractive target for influence by world powers.

Significance for Risk Taking and Stability

The levels of inequality indicate a highly risk acceptant population; Nigerians are a population primed for taking risks. Synergies between ethno-religious, rural/urban, and educated elite/commoner cleavages and risk acceptance present a political volatility situation that threatens trade and economic growth.

Implications for US Interests

The US is heavily vested in Nigeria, especially in its oil industry but also in Nigeria's political influence on the African continent. Inequality-fueled instability threatens this interest.

Implications for China's Interests

China shares much the same economic and political interests in Nigeria as the US, and therefore is equally threatened by instability.

Implications for Russia's Interests

Russia is much less vested in Nigeria but has sought influence at least through support of a potential nuclear industry in the country. This interest is also threatened by Nigeria's instability.

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Introduction

This is a summary report on inequality in Nigeria compiled as part of the Aggrieved Populations project conducted in support of the 2019 Strategic Multilayer Assessment (SMA) Future of Great Power Competition and Conflict project conducted for the JS-J39.

This report provides background on why the country was chosen, relevant historical background, literature review concerning inequality in the country, synopses of empirical data sources and analyses, and a concluding section that summarizes the findings. It is not intended to provide a comprehensive analysis of inequality and grievance in the country, but to place the empirical analyses conducted on this country in their social and political context and to highlight interesting cases of inequality pertinent to risk acceptance and great power competition. The analyses focus on the measurement of population risk sensitivity as a function of measured inequality using the Arrow-Pratt measure of risk aversion, whose positive values indicate risk aversion and negative values indicate risk acceptance. Studies have shown that risk acceptance is associated with social unrest, terrorism, and other forms of social disruption (Kuznar 2007; 2019). The full explanation of the underlying method and theory is presented in the summary report, *Inequality, Risk Sensitivity and Grievance in Context: Summary of Aggrieved Populations Country Reports*, submitted as part of this SMA project. This report is intended to be supporting material to that report and presumes familiarity with it.

In order to create an inclusive and more representative set of countries, an effort was made to analyze countries from each major region of the world (Africa, Central Asia, East Asia, Europe, Latin America, the Middle East, North America, South Asia).

Why Nigeria?

Nigeria was chosen for four reasons: 1) It is the most populous nation in Africa, 2) it is a major oil producer, 3) it has the largest economy in Africa, and 4) both China and Russia are seeking influence in the country and region.

Great Power Interests in Nigeria

Nigeria is key to US, Chinese, and to a lesser extent Russian strategic interests in Africa, due in large part to its economic might, and energy reserves. Nigeria is Africa's most populous nation (200 million), has the continent's largest economy, and is one of the world's major oil producers. As a dominant country in Africa, Nigeria's allegiance is important for strategic interests on the continent. However, Nigeria has a turbulent history of political instability, civil war and more recently has experienced one of the world's major jihadist insurrections, Boko Haram. Boko Haram's connection to ISIS creates a security interest for both the US and Russia. Boko Haram's mass killings and abductions have displaced over 2 million people, decreased foreign direct investment by 23%, depressed agricultural production in northern Nigeria and raised food prices throughout the country (Kimenyi et al., 2014). The Niger Delta region has also been plagued by violence from numerous insurgent groups who conduct kidnappings and killings of oil workers, pirate ships and oil, and disrupt oil operations.¹ Widespread illegal pirating of oil (bunkering) exacerbates corruption and inequality (Bragg, Brickman, Desjardins, Pagano, & Popp, 2015). Ethnic divisions also destabilize the country. Nigeria has over 300 ethnic groups, but its political system is

¹ For instances of grievance-based rebel groups interfering with oil production: <https://www.reuters.com/article/nigeria-security-avengers/new-militant-group-threatens-niger-delta-oil-war-in-latin-idUSL8N1J94QB>

dominated by three, the Hausa-Fulani of the North (approximately 35% of the population), the Yoruba of the southwest (20%) and the Igbo in the south central region (17%) (Bouchat, 2013). These three groups dominate Nigerian politics, and much political activity involves ethnic-based competition and conflict over political power and economic resources by elite members of these groups (Ajayi, 2014; Archibong, 2018; Bouchat, 2013; Halliru, 2012; Mustapha, 2006). The system of ethnic patronage fuels widespread corruption which is universally blamed for impeding Nigeria's economic progress, exacerbating inequality and creating political instability (Asiedu, 2006; Bouchat, 2013; Ebegbulem, 2012; Fagbadebo, 2007; International Monetary Fund, 2019; Ogundiya, 2010). Bouchat (2013) argues that these intersecting challenges threaten to fracture Nigeria along each of these dimensions.

To the extent that US national interests intersect with Nigeria, it is because of Nigeria's political, economic and demographic influence in Africa, its rich natural resources, especially oil, and the market potential of its large population, all of which depend on Nigeria's stability (Bouchat, 2013). Inter-ethnic competition, corruption and insurgency all threaten Nigeria's stability and therefore US interests.

China has increased its aid and political contact with Nigeria dramatically in the past 20 years (Lola & Devadason, 2018; Rindap, 2015). China's primary economic interests are in extractive industries, primarily oil, but also mining, logging, fishing and agriculture (Adunbi & Stein, 2019; Lola & Devadason, 2018; Page, 2018). China's economic interaction has placed Nigeria increasingly dependent on China, and some unscrupulous Chinese business practices (bribery, illegal mining and logging) have exacerbated local ethnic conflicts over resources, but the sheer quantity of direct investment and aid has probably helped the Nigerian economy to grow (Lola & Devadason, 2018; Page, 2018). One reason for Nigeria's turn to China is a closer interaction with BRICS (Brazil, Russia, India, China, South Africa) countries driven by disappointments in IMF and World Bank aid (Folarin, Ibietan, & Chidozie, 2016). China and Nigeria have increased their diplomatic ties with one another and Nigeria often votes with China in the UN (Page, 2018). Recent Chinese media have praised new "win-win" ties with Nigeria in politics, economy, infrastructure, and culture.²

Russia has much less economic clout in Nigeria compared to China and the US, however Russia has recently agreed to sell arms to Nigeria for counterterrorism efforts (Omotuyi, 2018) and the Russian nuclear company Rosatom has invited applications for Nigerian students for nuclear education in Russia.³

Literature Review on Inequality in Nigeria

Nigeria is considered a highly unequal society, although its inequalities lie along several different dimensions that interact in complex ways. Ethnic division is an often-cited dimension, although its manifestation is nuanced. Politically, Nigeria has been historically dominated by Hausa-Fulani from the Islamic North (Mustapha, 2006). However, wealth has concentrated in the Christian South, especially among Yoruba and Igbo (Archibong, 2018; Madu, 2006; Mustapha, 2006). This disjunction between political power and wealth, however, is explained by the fact that inequality is greater within Hausa-Fulani segments of society; elite Hausa-Fulani dominate the Nigerian political system and receive the benefits, but these benefits evidently do not trickle down to their constituents in the North. The elites retain their constituency, however, because of pervasive distrust between ethnic and religious groups that prevents defection from the elites who represent them (Archibong, 2018; Mustapha, 2006).

² Chinese praise of bilateral relations with Nigeria: http://www.xinhuanet.com/english/2018-11/06/c_137585555.htm

³ Russian investments in Nigerian nuclear education: <https://www.esi-africa.com/industry-sectors/research-and-development/thousands-of-nigerians-apply-to-study-nuclear-technology/>

An urban/rural divide complicates and interacts with the ethnic and religious divides in Nigeria. Rural inequality is comparable to other undeveloped economies in Africa (Babatunde, 2008). In comparison, inequality is greater in rural areas than urban settings (Madu, 2006; Oyekale, Adeoti, & Oyekale, 2006). The urban/rural divide is compounded by geographical and ethno-religious dimensions since the most rural and poorest regions of Nigeria are those in Islamic North (Archibong, 2018; Madu, 2006).

Country-Level Measures of Inequality in Nigeria

Nigeria was initially assessed with a collection of country-level metrics. These metrics provide measures of the country's inequality compared to other nations, inequality within the country, social conditions that may be consequences of that inequality, and the prognosis for stability in the future (**Error! Reference source not found.**).

Nigeria is a poor country. Its national per capita GDP is \$1,994, placing it in the lower third of countries, and it has a very low Inequality-adjusted Human Development Index (IHDI), also placing it in the lower third of countries. However, Nigeria's Gini coefficient based on World Bank income centiles is relatively low, ranking it near the bottom 6% of all countries; Nigerian elites do not control vastly greater wealth than elites in most countries. However, Nigerians are for the most part poor and underemployed. A symptom of chronic underemployment is the fact that its informal employment is 93% of the country's total employment. Seemingly, much of the nation is subsisting through employment not officially registered as part of the country's economy. These types of income sources tend to be below market value for labor and are very volatile.

Table 1. Nigeria: Basic Statistics on Inequality

Measure	Value	Rank	Source
Inequality Compared to Other Nations			
Per Capita GDP 2018	\$1994	138 of 187	WB
Country Measures of Inequality			
Inequality-adjusted Human Development Index (IHDI) 2018	0.347	126 of 151	UN
Gini Coefficient	26.8%	172 of 184	WB
Informal Employment as % of Total Employment	92.9%	11 of 112	ILO
Measures of State Instability			
Fragile States Index	99.9	14 of 175	FFP
Terrorism Index	8.660	3 of 160	IEP
Probability of Mass Killing	0.031	21 of 161	EWP
Risk Sensitivity			
Average Arrow-Pratt Measure	-4.70	113 of 158	This Study
<p>*EWP – Early Warning Project, FFP – Fund for Peace, IEP – Institute for Economics and Peace, ILO – International Labor Organization, UN – United Nations, WB – World Bank</p> <p>-The Inequality-adjusted Human Development Index (IHDI) is a UN measure of well-being and is a scale based on per capita GDP, life expectancy and education levels of the population.</p> <p>- The Fragile States Index is based on twelve conflict risk that include security apparatus, factionalized elites, group grievance, economy, economic inequality, human flight and brain drain, public services, state legitimacy, human rights and rule of law, demographic pressure, refugees and IDPs, and external interventions. The potential range of the index is zero (no fragility to 120 total fragility).</p>			

- The Terrorism Index scores each country on a scale from 0 to 10; where 0 represents no impact from terrorism and 10 represents the highest measurable impact of terrorism.

Nigeria scores in the top 10% of fragile states, probably due to the combined effects of ethnic factionalism, corruption, and inequality detailed above, and has one of the absolute highest Terrorism Indices, mostly due to jihadist movements such as Boko Haram. Nigeria's probability of mass killing is also high, in the top third of countries. Its average Arrow-Pratt measure, based on the World Bank income data, is -4.70, which is in the bottom 72% of countries, indicating a highly risk acceptant population.

Prognosis for Change to 2029

Nigeria's dependence on oil creates an uncertain economic future because it is subject to a volatile and uncertain oil market. The persistent ethnic politics and corruption appear to mire Nigeria in an unending cycle of political turmoil that has the danger of erupting into major fragmentation and conflict. All of these factors seem to guarantee that current inequalities and grievances country-wide and between geographic and ethno-religious groups will persist. Another long-term factor is global climate change, which is disproportionately affecting Nigeria negatively, especially in its impoverished and radicalized North (Bragg et al., 2015). While the prognosis for sustainable economic growth and political stabilization within Nigeria seems dim, Nigeria's size and wealth in natural resources will continue to attract investment from world powers seeking to profit from extractive industries, to sell to the large market, and to seek political influence over one of Africa's most influential countries.

Empirical Data on Inequality in Nigeria

Dataset 1: 2016 Nigeria World Bank Quintile Data

The World Bank provides data on lowest and highest decile, and quintiles of percentage of income or consumption.⁴ These data are used to calculate their Gini coefficients. While not exactly measuring the actual income, the percentage of overall income provides an approximation. The Nigerian data were gathered in 2016. **Error! Reference source not found.** presents the original data and the fitted distribution curve from which the Arrow-Pratt risk sensitivity measures will be derived, as well as the Arrow-Pratt measures of risk sensitivity.

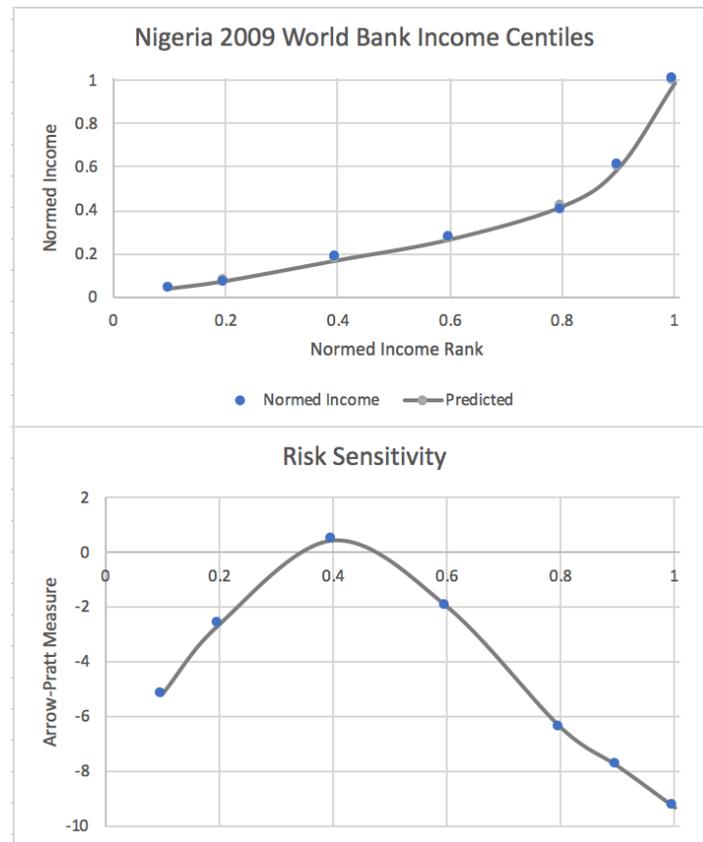


Figure 1: Distribution of Income, World Bank Quintiles Nigeria 2016 and associated Risk Sensitivity.

Summary Dataset 1: 2016 Nigeria World Bank Quintile Data

The risk sensitivity data paints a picture of a risk-loving population. The average Arrow-Pratt measure of risk sensitivity is -4.70 with respect to these data, which is well below the average of -4.64 for all countries and ranks it in the 28th percentile of risk sensitivity (**Error! Reference source not found.**). Furthermore, Nigeria is unusual in that nearly everyone in Nigeria is predicted to be risk loving due to the strong exponential increase in income as one ascends the social ladder. While all Nigerians are predicted to be risk loving, some variation occurs. The lowest 35% of the population exhibits a high degree of risk acceptance, and there is a small and slightly risk averse segment around the 40th percentile (**Error!**

⁴ Data drawn from: <http://wdi.worldbank.org/table/1.3>

Reference source not found). The upper half of society exhibits increasing risk loving potential, exceeding even that of the poorest Nigerians.

Dataset 2: USAID DHS 2013 Nigeria Wealth Factor Score

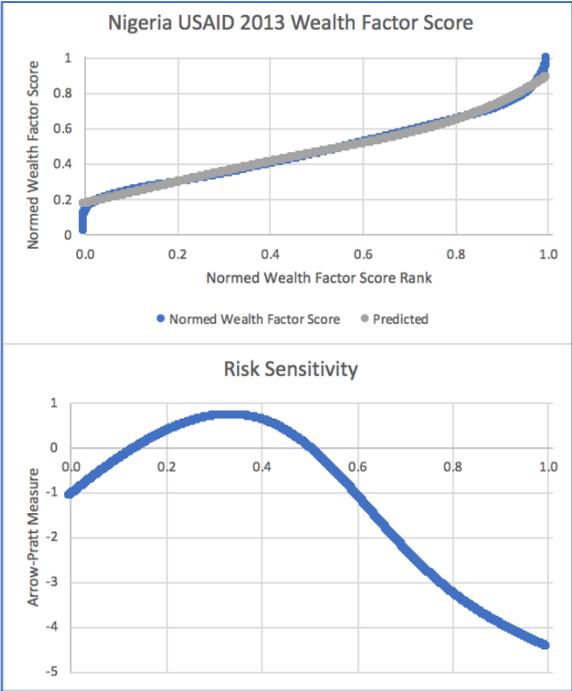


Figure 2. Nigeria 2013 Wealth Factor Score and Risk Sensitivity

Summary Dataset23: USAID DHS 2013 Nigeria Wealth Factor Score

The USAID Demographic Household Survey of 2013 provided data on the wealth factor scores of 38,522 households. They exhibited a mean Arrow-Pratt score of -1.09. These data indicate that the poorest Nigerians (below the 15th percentile in these data) are mildly risk acceptant, and those between the 15th and 50th percentiles are mildly risk averse, and above the 50th percentile, Nigerians become increasingly risk acceptant.

Findings on Inequality in Nigeria

Relevance to Instability and Social Cleavages

Nigeria has a largely risk acceptant population whether measured through income or wealth factor scores. Ethno-religious and geographic cleavages, urban/rural divides and within-group inequalities exacerbate the level of risk acceptance. Inequality is greater in rural areas than urban, leading to greater potential for inequality-based grievance in these areas. The Hausa-Fulani Islamic North is markedly unequal to the Yoruba and Igbo Christian South, creating grievances geographically and along ethnic and religious divides. Niger Delta dwellers are impoverished compared to the oil companies and their workers who profit and pollute the delta environment, creating grievances there. Finally, a pervasive difference exists between an educated elite in the main ethnic groups and everyone else, creating a cleavage between political elites and their constituents. This cleavage can threaten elite power, but more often ethno-religious and rural/urban cleavages are used by elites to mobilize support for elite competition over power and resources. Ethno-religious distrust often trumps local grievances over inequality. Elite competition and ethnic fears fuel corruption that further exacerbates these cleavages. The net effect is a country, highly fractionalized across several dimensions, whose economic growth and state stability is threatened.

Opportunities and Pitfalls for the US and Adversaries

Nigeria's instability and fractionalization, based on the complex inequalities and high-risk acceptance of its population, threatens US economic and national security interests. Furthermore, the persistence of the Boko Haram jihadist insurgency weakens the Nigerian government and its economy and presents a potential source of attacks against US interests in the region. Nigeria's opportunities exist in its oil wealth and the size of its population and economy on the African continent.

China

China experiences the same pitfalls from instability and opportunities from Nigeria's instability and risk acceptance, and its large population and economy size as the US. Boko Haram probably does not pose as much of a threat to China since ISIS has not targeted China and Chinese interests as much as it has the US and Russia.

Russia

Russia has much less vested in Nigeria than the US or China but has forged ties to the development of a Nigerian nuclear industry. Nigeria's pervasive instability threatens this project.

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