

## THE ECONOMIC AND SOCIAL COSTS OF OUT OF SCHOOL CHILDREN IN NIGERIA

### Executive Summary

Out-of-school children (OOSC) has long been a global problem that affects a country in various ramifications. With 10.5 million OOSC, Nigeria is recognised to have the largest number of children not attending school in the world. The economic and social repercussions of not educating these children in Nigeria are examined in this brief. Exploratory data analysis and empirical estimation reveal the following facts:

- Economic costs due to OOSC in Nigeria is estimated to be about US\$40 billion in modest terms.
- A higher number of rural dwelling children do not go to school as compared to the children living in the urban areas in Nigeria.
- Income poverty keeps more children out of school.
- The Northeast geo-political zone has the largest percentage of OOSC in Nigeria.

*“Economic costs due to OOSC in Nigeria is estimated to be about US\$40 billion in modest terms.”*

Policy recommendations made therefore include the targeting of education intervention towards vulnerable groups, promotion of policies to address supply side barriers to education and the implementation as well as scaling up of Accelerated Education Programmes (AEP).

### Introduction

Human capital development is one of the most important drivers of economic growth and development. Investing in basic education is the cornerstone of any country's human capital development. This is arguably the basis for the inclusion of sustainable development goal 4

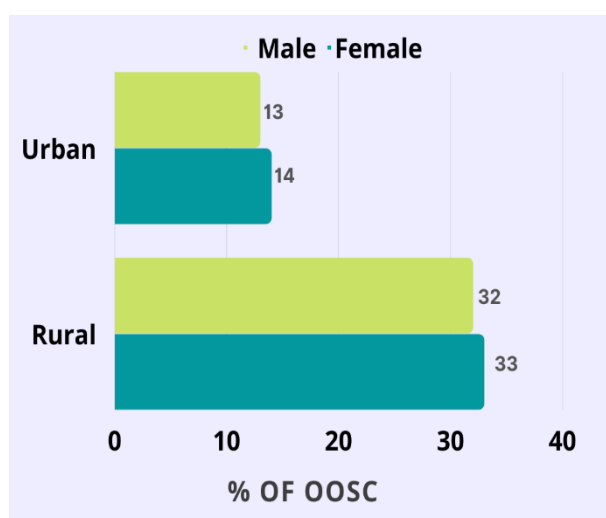
(SDG4) among the development goals in agenda 2030 by the United Nations. Nigeria lags behind in the race towards achieving SDG4 as the country records the highest number of out-of-school children (OOSC) in the world. About 10.5 million children and adolescents of schooling age are excluded from basic education (United Nations, 2022). This amounts to a huge deficit in human capital formation, translating into a substantial economic cost to the country. The social and political spheres are also exposed to the problems of OOSC in Nigeria. Lower crime rates are associated with higher education levels and electorates who are educated are able to demand for accountability in governance (Larreguy & Marshall, 2017). Societies with low levels of literacy also tend to enjoy some positive spill-over effects of basic education like improved public health. As far as the economic value of education is concerned, it is worth investigating the counterfactual of how much more Nigeria's GDP would have risen, had the OOSC been educated and injected into the labor market. The goal of this research, therefore, is to highlight the cost of this deficit in human capital formation as indicated by the high number of OOSC on economic growth, estimated in terms of GDP loss to the Nigerian economy. The social and political repercussions are further examined. Ultimately, the findings of this brief should stimulate policy efforts towards reducing OOSC and ensuring that every child in Nigeria has access to basic education, providing them the opportunity to maximize their economic and social potential.

### Stylised Facts on Out-of-School Children in Nigeria

Data from the Nigerian Multiple Indicator Cluster Survey for 2016/2017 shows a disparity by socio-demographic features in the percentage of OOSC in Nigeria. For example, Figure 1 reveals that the

percentage of children who live in the rural areas that do not go to school is significantly higher than those in the urban areas by 19 percentage point. This is associated with the high level of poverty and economic deprivation in rural areas. A gender perspective to this reveals that the number of OOSC for girls is only slightly higher compared to the number of OOSC for boys in both the rural and urban centres. This can be attributed to socio-cultural norms, child marriage and poverty in Nigeria that significantly hamper human capital accumulation for girls than boys (Okorie, 2017).

**Figure 1: OOSC of primary school age by residence and gender**

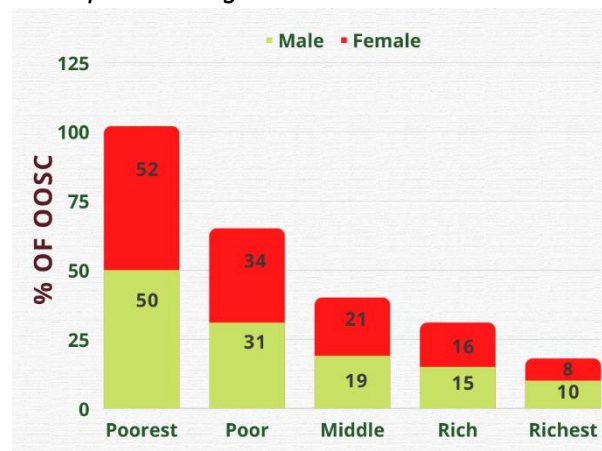


Source: Nigeria Multiple Indicator Cluster Survey 2016-2017

Figure 2 reveals OOSC wealth index by gender. More girls are out of school than boys in each wealth class except among the richest where the proportion of out-of-school boys is greater than the girls' by about 2%. In the overall, the proportion of out of school children decreases as wealth index improves suggesting a negative correlation between the two variables. This accentuates the link between OOSC and poverty as one of the identified barriers to accessing education.

*“Overall, the proportion of out of school children decreases as wealth index increases, suggesting a negative correlation between out of school rate and wealth.”*

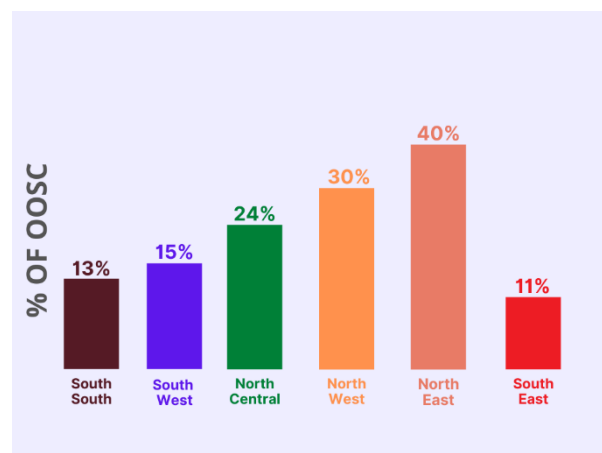
**Figure 2: OOSC of primary school age by wealth index quintile and gender**



Source: Nigeria Multiple Indicator Cluster Survey 2016-2017

WFP (2021) reveals that in Adamawa, Borno and Yobe states, which are in the North-eastern part of Nigeria, over 2 million people reside in IDP camps and host communities. A contributory factor to this situation is the conflict arising from insurgency which has led to the displacement of people. Figure 3 evidently shows that the northern geopolitical zone has a significantly higher proportion of OOSC in Nigeria, as seen in the northeast (40%), north central (24%) and northwest (30%) compared to the southern regions. The Southeast is revealed to have the lowest proportion of OOSC in the country (11%).

**Figure 3: OOSC of primary school age by geopolitical zones**

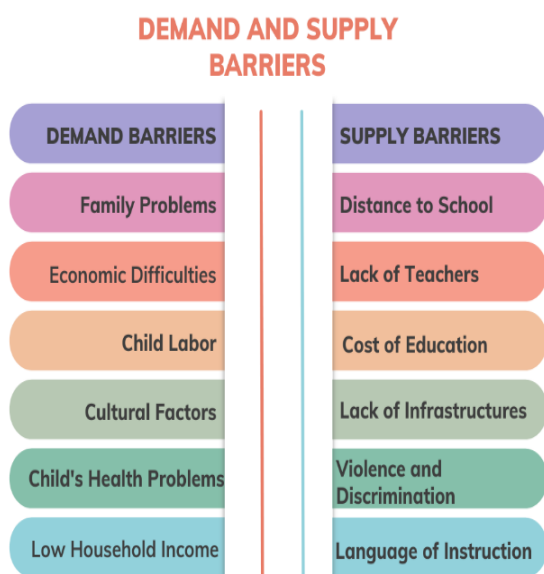


Source: Nigeria Multiple Indicator Cluster Survey 2016-2017.

**Barriers to Accessing Education**

The challenges that restrict a child’s access to schooling have been identified as barriers to education. These barriers are categorized as either demand and supply side constraints comprising of economic, health, social, and demographic factors. On the demand side, family troubles, economic hardship, and child labor are some key concerns influencing the obstacles to schooling. On the supply side, distance to school, lack of teachers, and the cost of education are some key hurdles to education. The supply-side constraints signify that proactive government policies can improve schooling.

Figure 4: Demand and Supply Barriers to Education

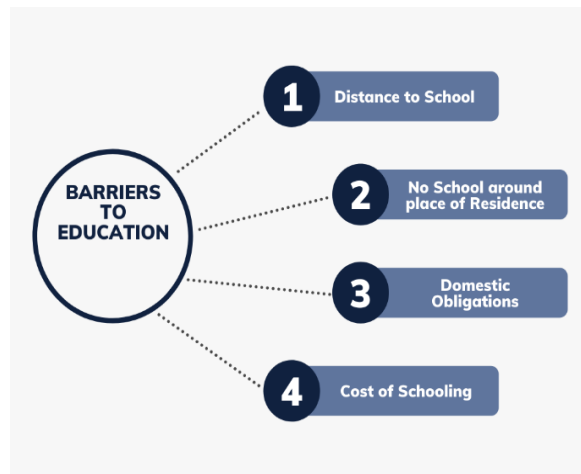


Source: United Nations Educational, Scientific and Cultural Organization (UNESCO).

Data from the 2020 Nigeria Education Data Survey (NEDS) shows that one of the major reasons for children not attending school is due to unavailability of school around the area of residence. As shown in figure 5, distance to school thus constitutes a barrier to school attendance. This is a pointer to the fact that more needs to be done in terms of school mapping by the education planners. Domestic obligations and the cost of schooling are also some major factors that influence OOSC in Nigeria.

*“Distance to school constitutes a barrier to school attendance. This is a pointer to the fact that more needs to be done in terms of school mapping by the education planners.”*

Figure 5: Major Barriers to Education in Nigeria



Source: Nigeria Education Data Survey, 2020.

### Economic Cost of Out-of-School Children

OOSC imposes enormous economic costs on individual and society at large, albeit in the long run. In the short run, OOSC could contribute modestly to the economy through participation in farming and non-farm activities that generate immediate stream of income to the family. However, the economic costs are compounded overtime with the loss of productivity. Basically, education increases lifetime income and expands labour market potentials of an individual. Additionally, educated workforce is crucial to technological innovation and structural transformation (Psacharopolous & Patrinos, 2004).

Putting number on this loss due to OOSC is difficult given the uncertainty about income path. However, Milan & Burnet (2014) have employed some plausible methodologies that provide some estimates on the economic costs. Their approach attempts to answer the question: “If all of today’s children that do not complete primary school actually do complete basic education; how much higher will GDP be in Nigeria when that cohort of children enters the labor market in ten years, relative to a counterfactual in which those OOSC never completed primary education?”(p.19). They did this using both the macroeconomic and microeconomic approach. The methodology is summarized in Box 1.

The estimated economic costs of OOSC are shown in figure 6. The estimates arrived at by the macro approach is higher than the micro approach because it captures some of the positive externalities that come with primary education, rather than only direct private income gains (Milan

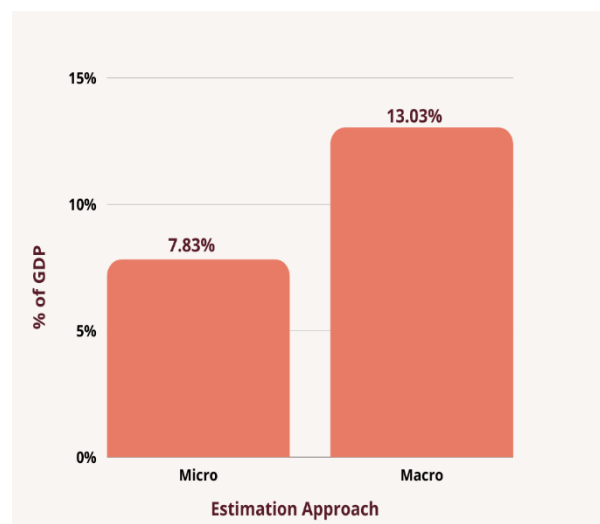
**Box 1: OOSC economic costs estimation methods**

The microeconomic method involved aggregating the estimated productivity deficits of individuals who are not expected to complete primary education. Using the MICS data of 2013, Milan & Burnet (2014) derived the GDP loss from forgone primary education by multiplying the percentage of non-completion of primary education with the wage premium from primary education completion. Also, the value of primary education as a passage to secondary education was measured as probability weighted loss of forgone secondary education and then added to the forgone primary education estimated earlier.

The macroeconomic approach on the other hand employed time-series data to estimate the income gains associated with human capital accumulation. The estimation in this case measured the effect of an additional year of schooling on the per capita income, controlling for other influencing factors like capital stock per capita and parental income. This follows the approach in Barro & Lee (2010) growth model

& Burnett, 2014). In simple terms, the estimates indicate what a hypothetical child drawn from the population would have contributed to the national output if he/she was educated up to basic education level. Irrespective of the approach, the economic costs of OOSC is huge in the Nigerian economy. If we take the conservative estimate from micro approach, OOSC costs the economy about 7.83% of the GDP per annum. This amounts to about USD 40billion (current US\$). Given that the number of OOSC in Nigeria since 2013 has been on the rise, and GDP figures for Nigeria is relatively lower (current US\$ 432billion), these estimates can be argued to be now higher within the context of current realities.

**Figure 6: Estimates of Economic Cost of OOSC**



Source: Milan & Burnet (2014)

To provide a sense of how enormous this number means, the economic costs due to OOSC situation in Nigeria is greater than the GDP of Burkina Faso, Mali and Chad, put together<sup>1</sup>. This is a colossal waste which is avoidable with the implementation of the right policies to address the issue of OOSC.

**Table 1: Comparison of macro estimates between Nigerian and some West African Countries**

Country	OOSC Costs estimate as % of GDP	Monetary value (World Bank 2013 GDP in current US\$ billion)
Mali	18.16	2.4
Burkina Faso	17.02	2.3
Cote d'Ivoire	14.06	6.0
Gambia	13.46	0.2
Nigeria	13.03	66
Senegal	10.19	1.9
Liberia	3.07	0.1
Ghana	1.92	1.2

Source: Author's computation based on Milan and Burnet (2014) and World Bank Data

This brief also compares the economic costs in Nigeria with other countries in the West Africa countries based on Milan & Burnett (2014) estimates. This comparison is provided using only the estimates derived by the macro approach. Ghana has the lowest (1.92%) while Mali has the highest (18.16). Nigeria's is found somewhere near the median (13.03%). However, when these estimates are translated to their monetary value,

<sup>1</sup> This applies to 2013 GDP from world bank data in current US\$

Nigeria incurs the highest loss as a result of high population of OOSC.

### Social and Political Cost of OOSC in Nigeria

Educational attainment is inextricably related to social well-being. This can be seen in the communication benefits of functional literacy and numeracy; health benefits, such as maternal education on child mortality; benefits through research and development and/or technology adoption; and benefits via improved public policy from having educated politicians, technocrats, and electorates, among others. Studies also show that education has a dampening impact on the level of crime in a country (Machin, Marie & Vujic, 2010). The analysis of a survey conducted by Brookings Institute<sup>2</sup> on Boko Haram insurgency in Nigeria suggests that support for extremism in the northern regions declined sharply as education level moved from Junior Secondary (50%) to Senior Secondary (10%) up to the tertiary (about 8%). Similar survey by Egwakhe and Osabuohien (2009) revealed that missed educational opportunity highly contributes to crime, “area-boyism”<sup>3</sup> and indulgence.

Education, especially at higher level, has also been found to have profound impacts on the political wellbeing of a nation. These impacts range from electoral participation to improved public policy by having educated politicians, technocrats and electorates. Publicly provided primary education influences individual civic and political participation as well as attitudes (Larreguy & Marshall, 2017). This is particularly pertinent as many of sub-Saharan Africa’s nascent democracies are failing to consolidate (Opalo 2012; Larreguy & Marshall, 2017) or hold governments to account beyond the voting booth (Bratton & Logan 2006; Larreguy & Marshall, 2017). In weakly institutionalized polity like Nigeria, vote buying is prevalent and often targets the least educated people. Education therefore has the potential of dampening the vote buying syndrome as educated voters choose to cast their preferences rather than sell their vote (Larreguy & Marshall, 2017).

The foregoing implies that apart from the cost arising from the waste in the economic potentials

of the OOSC, there is a loss in social and political wellbeing of a country which further compounds the cost of failing to invest in the education of OOSC in the economy.

### Recommendations

In the light of the forgoing, policy recommendations are made as follows:

- Pro-poor policies towards promoting equitable access to education for all should be sustained. Policies such as abolition of school fees, provision of textbooks and stationeries, school feeding programme, among others, have the potential to eliminate the poverty barrier to education.
- The government should ensure favourable school mapping so that schools are sited in locations that are easily accessed by rural dwellers in terms of distance.
- The government should leverage on the **Accelerated Education Programme (AEP)**, an education innovation typically deployed by development organisations to provide flexible and accelerated education to mainstream the OOSC in Nigeria. As a complement to the formal education system, this innovation should be scaled up to cut across all ethnic groups in all geo-political zones in Nigeria. A scaled-up AEP intervention, sustained over the next 5 years, holds the prospect of reducing OOSC numbers drastically in Nigeria. This will translate to a significant cost saving to the Nigerian economy.

*“A scaled-up AEP intervention, sustained over the next 5 years, holds the prospect of reducing OOSC numbers drastically in Nigeria. This will translate to a significant cost saving to the Nigerian economy.”*

<sup>2</sup> <https://www.brookings.edu/blog/order-from-chaos/2020/05/07/the-fundamental-connection-between-education-and-boko-haram-in-nigeria/>

<sup>3</sup> Coined from the term “Area boy” which connotes a street urchin or hoodlum

## References

- Barro, R., & Lee, J. (2010). A new data set of educational attainment in the world, 1950-2010. *NBER Working Paper 15902*.
- Egwakhe, A., & Osabuohien, E. (2009). Educational backgrounds and Youth Criminality in Nigeria. *InFo*, 12(1), 65-79.
- Home Office Research Development and Statistics Directorate. (2004). *Home Office Citizenship Survey 2003: People, Families and Communities*. Retrieved from <https://www.ojp.gov/ncjrs/virtual-library/abstracts/home-office-citizenship-survey-2003-people-families-and-communities>
- Larreguy, H., & Marshall, J. (2017). The Effect of Education on Civic and Political Engagement in nonconsolidated Democracies: evidence from Nigeria. *The Review of Economics and Statistics*, 99(3), 387-401.
- Lochner, L., & Moretti, E. (2004). The Effect of Education on Crime: evidence from prison inmates, arrests, and self-reports. *American Economic Review*, 94(1), 155-189.
- Machin, S., Marie, O., & Vujic, S. (2010, June). The Crime reducing effect of Education. *IZA Discussion Paper No. 5000*.
- Milan, T., & Burnett, N. (2014). *Exclusion from Education: The Economic Cost of Out of School Children in 20 Countries*. Results for Development.
- Milan, T., & Burnett, N. (2015). *The Economic Cost of Out-of-School Children in Southeast Asia*. United Nations Educational, Scientific and Cultural Organisation. Retrieved from <https://r4d.org/wp-content/uploads/Economic-Cost-OOSC-Southeast-Asia.pdf>
- Okorie, M. (2017). An Assessment of Factors Militating against Girl Child Education in Nigeria. *International Journal of Advanced and Multidisciplinary Social Science*, 3(2), 49-54.
- Opalo, K. (2012). African elections: Two divergent trends. *Journal of Democracy*, 23(3), 80-93.
- Patrinos, H. A., Colclough, C., & Kingdon, G. (2014). Patterns of Returns to Education and its Implications. *Research Consortium on Educational Outcomes and Poverty*(4).
- Psacharopoulos, G., & Patrinos, H. A. (2004). Returns to Education : A further update. *Education Economics*, 12(2), pp. 111 - 134.
- Unicef. (2022). *Nigeria*. Retrieved from <https://www.unicef.org/nigeria/education>
- World Food Programme. (2021). *North-eastern Nigeria Emergency*. World Food Programme. Retrieved from <https://www.wfp.org/emergencies/nigeria-emergency>