

Nigeria's Demographic Dividend: The Ticking Clock and the Open Window

Nigeria has a big advantage in her population structure. Indeed, one of the selection criteria used by Jim O'Neill, a British economist who once gave the world its most consequential acronym (BRICS), in identifying the MINT countries (built on three pillars) is large and young populations. This can generate a demographic dividend that would sustain growth for decades and in theory can be a source of vibrant domestic consumption.

Yet Nigeria, the most populous black nation on earth stands at a fork in the road in which one path leads to an economic miracle while the other leads to a humanitarian catastrophe. According to projections, in the year 2050, 24 (twenty-four) years from now, close enough to be the professional prime of a child born in Lagos today, Nigeria will be the third most populous country on Earth. It will have overtaken the United States sometime in the 2040s, and it will be bearing down on Pakistan for third place behind India and China. Its population, which stands at approximately 230 (two hundred and thirty) million today, will by most credible projections exceed 400 (four hundred) million by mid-century, making it home to roughly 1 (one) in every 25 (twenty-five) human beings alive at that moment. By 2100, on current trajectories, Nigeria's population will approach 800 (eight hundred) million, a number larger than Europe and North America combined.

These are not speculative numbers. They are the median projections of the United Nations Population Division, computed by some of the most rigorous demographic modellers in the world. They are numbers of a magnitude that should be at the centre of every serious conversation about the global economy, the future of Africa, and the development trajectory of Nigeria itself. These numbers are, instead, largely absent from those conversations but merely noted, acknowledged in footnotes, and then set aside in favour of more immediate concerns. Therefore, the same arithmetic that could position Nigeria as one of the transformative economic stories of the twenty-first century is, handled incorrectly, the precondition for a humanitarian crisis of a scale the world has probably not previously encountered.

The setting aside is a mistake. This is because what those numbers describe, at the intersection of demographic mathematics and economic development theory, is not simply a very large country getting larger, it is a civilisational fork in the road. Which path Nigeria travels is not predetermined by demography. It is determined by choices about education, employment, fertility, security, and the quality of governance that must be made. Also, the choices must begin to deliver results, within a window of opportunity that is already open and will not remain open indefinitely. The clock is ticking.

The arithmetic of Nigeria's demographic window is shown in Table 1. Figure 1 shows projections of Nigeria population through year 2100 (UN Medium Variant) as well as comparison of Nigeria's population with other countries of the world.

Table 1: Demographic indicators of Nigeria (2025-2026)

Indicator	Nigeria
Population (2026)	Approx. 235 million (6th globally)
Projected population (2050)	Approx. 401 million: overtakes USA (3rd globally)
Projected population (2100)	Approx. 791 million: larger than Europe + N. America
Median age (2025)	Approx. 18 years: youngest large country on Earth
% population under 25	Approx. 63%
Total Fertility Rate (TFR)	Approx. 5.1 children per woman
Population growth rate	Approx. 2.5% per year
New labour market entrants/year	Approx. 4 million (turning 15 annually)
Life expectancy at birth	Approx. 54 years
Human Capital Index (World Bank 2020)	0.361/1.0 (36th percentile globally)
Out-of-school children	Approx. 20 million: largest in the world

Figure 1: Nigeria Population Projections and Age structure vs Major Economies

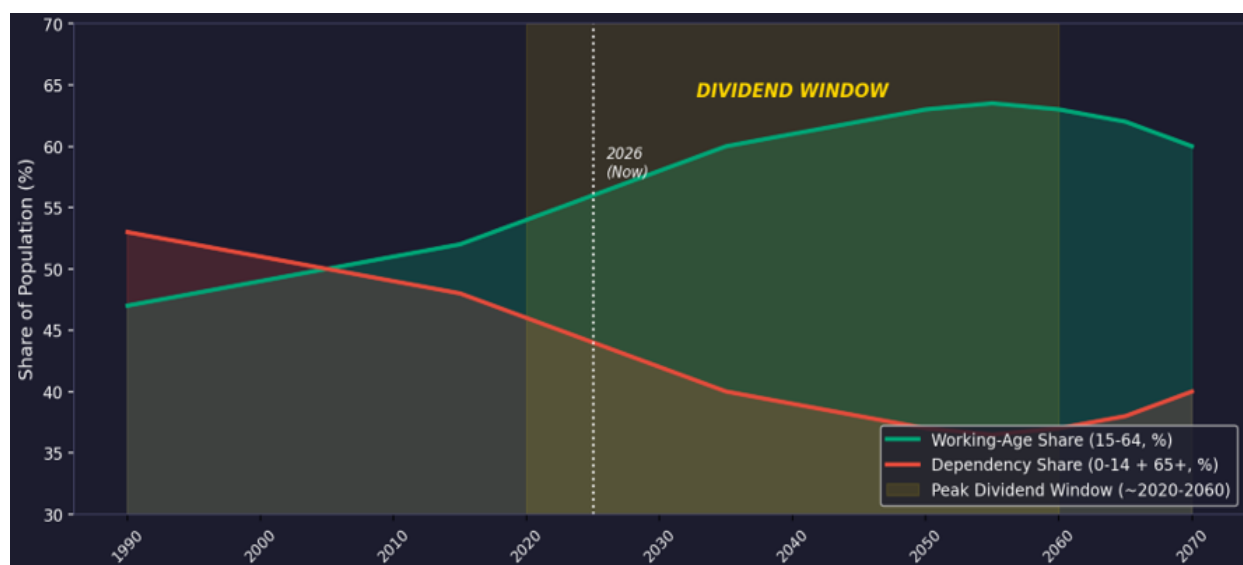


Sources: UN Population Division WPP 2024; World Bank (2025)

The numbers that define Nigeria's demographic situation are, once assembled in one place, simultaneously exciting and sobering. The excitement lies in scale: a country where 63% (sixty-three percent) of the population is under 25 (twenty-five) and where approximately 4 (four) million young people enter working age every single year possesses a labour force growth that no amount of automation or technological substitution can replicate in the near term. The sobering reality lies in the gap between that potential and the current capacity to realise it, which is measurable, visible, and in certain critical dimensions, widening rather than narrowing.

Now, turning to understanding demographic dividend: what it is, and why it matters. Looking at figure 2, we can appreciate how it works.

Figure 2: Nigeria's Demographic Dividend Window: Working-Age vs. Dependency Share of Population, 1990-2070



Sources: UN WPP 2024; World Bank; author's projections

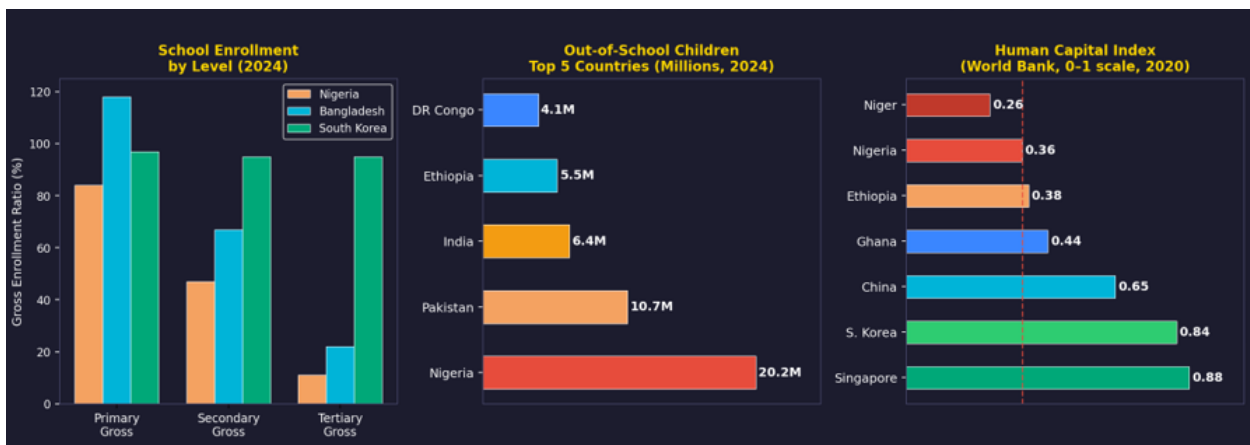
The concept of the demographic dividend was formalised by Harvard economist David Bloom and his colleagues in a series of papers published in the 1990s and early 2000s, drawing on the experience of East Asia's extraordinary growth between 1960 and 1990. Bloom and his collaborators observed that a significant portion, with estimates ranging from one-quarter to one-third of the East Asian miracle of sustained double-digit economic growth, was attributable not to superior policy, technology, or natural resource endowment, but to the favourable age structure of those countries' populations during that period. The demographic dividend, therefore, refers to the potential for economic growth that arises from changes in a country's age structure, particularly when the working-age population (ages 15–64) becomes larger relative to the dependent population. This shift typically occurs as fertility rates decline toward or below the replacement level of about 2.1 children per woman, creating conditions that support higher savings, increased investment, and accelerated economic development. When the share of the population in working age is rising relative to the share of dependents, an economy gains a natural tailwind. This implies that there are more producers than dependents thereby leading to savings rates' rise, consumption expansion, and if the institutional conditions are right, investment flows towards employment of the growing workforce.

The dividend is not automatic. This point cannot be emphasised too strongly, because the failure to understand it will lead to a form of demographic fatalism. A mere assumption that Nigeria's large young population will translate into economic dynamism by virtue of its sheer size will not materialise. The dividend is a potential, not a guarantee. It is converted from potential into reality only through the parallel delivery of

three conditions: a workforce that is sufficiently educated and skilled to be productively employed; an economy that generates enough jobs to absorb the workforce as it enters the labour market; and a governance environment that allows the savings and investment flows that a young population enables to be channeled into productive economic activity rather than consumed by corruption, conflict, and capital flight. Countries that have met those three conditions have converted their demographic windows into economic transformations of extraordinary speed and depth. Countries that have not converted their windows have evolved into what economists gently describe as a 'youth bulge problem,' characterised by mass youth unemployment, social unrest, and political instability.

For Nigeria, Figure 3 shows suggestion of education crisis in which deficit forecloses the anticipated dividend. Here, we see school enrollment, Top 5 examples of countries with global ranking of out-of-school children and how their Human Capital Index compare with Nigeria's.

Figure 3: Enrollment Gaps, Out-of-School Children and Human Capital Index



Sources: UNESCO UIS; World Bank HCI 2020; UNICEF (2024)

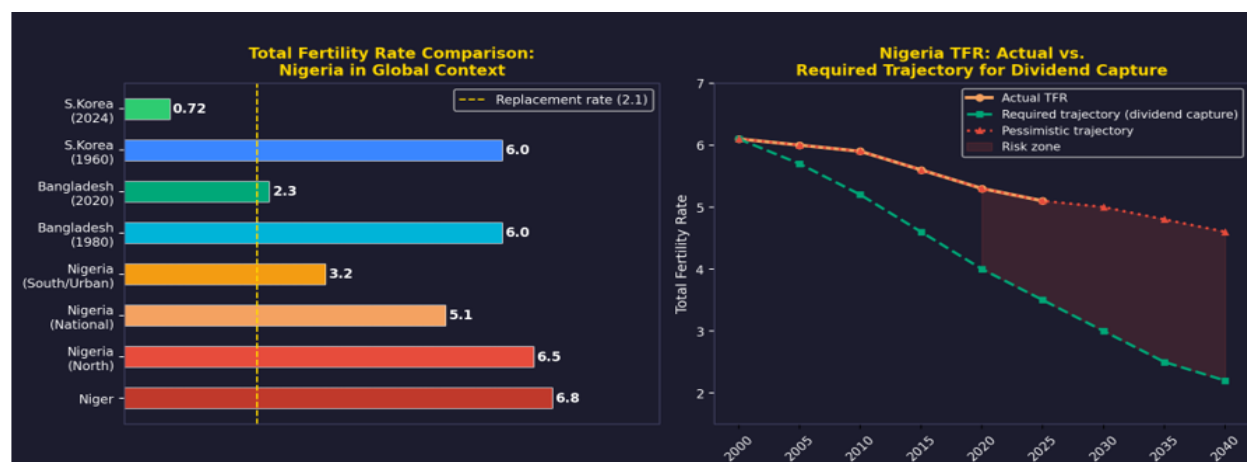
To begin with, education is the first and most fundamental precondition for converting demographic potential into economic output. But Nigeria has the largest number of out-of-school children of any country on Earth with approximately 20 (twenty million) children of primary and secondary school age are not in school. This is not a rounding error or a data artifact; it is a structural fact about the relationship between Nigeria's population growth and its educational infrastructure. Gross primary enrollment ratios

appear superficially adequate with approximately 84% (eighty-four percent) but the headline figure conceals dropout rates, ghost schools, absent teachers, and quality deficits so severe that UNESCO has described Nigeria as a country with a 'learning crisis' rather than merely an 'access crisis.' Children are enrolled but not learning. The Annual Status of Economic Report (ASER) Nigeria surveys and the World Bank's own highlight a severe learning crisis in Nigeria, "Learning Poverty", with assessments that have consistently found that a majority of Nigerian ten-year-olds cannot read a simple sentence with comprehension. This finding goes far beyond what any gross enrollment ratio can capture.

Secondary enrollment tells a starker story: approximately 45% (forty-five) to 50% (fifty percent) of Nigerian adolescents of secondary school age are actually in secondary school. Tertiary enrollment, the share of young adults in universities, polytechnics, and professional training is approximately 10% (ten percent) to 12% (twelve percent), one of the lowest ratios of any large economy. Nigeria's federal universities are chronically underfunded, serially disrupted by Academic Staff Union of Universities (ASUU) strikes that have in some cycles taken cumulative years out of academic calendars, and structurally misaligned with the skills that a diversifying economy actually needs. The country produces approximately 600,000 (Six hundred thousand) university graduates annually: a number that represents approximately 15% (fifteen percent) of the annual cohort entering working age, leaving the remaining 3.4 million new labour market entrants each year with secondary school certificates at best, and in many cases with considerably less. The World Bank's Human Capital Index places Nigeria at 0.361 meaning that a Nigerian child born today will realise only 36% (thirty-six percent) of their productive potential given the current quality of education and health services available to them. By comparison, South Korea scores 0.84. Even Ethiopia and Ghana, supposedly smaller economies have index higher than that with 0.38 and 0.44 respectively.

The fertility challenge is almost certainly the number that determines everything. The combo of two graphs in Figure 4 shows Nigeria's total fertility rate in global context and the required trajectory for demographic dividend.

Figure 4: Total Fertility Rate (Nigeria vs Comparators)



Sources: UN WPP 2024; NPC Nigeria DHS 2023; World Bank

Of all the statistics that define Nigeria's demographic position, the one that matters most and the one that receives the least serious public policy attention is the total fertility rate (TFR). This is the average number of children born to a Nigerian woman over her lifetime. That rate stands at approximately 5.1, making Nigeria one of the highest-fertility large countries in the world. The fertility rate matters because it determines how fast the dependency ratio falls, which determines how quickly the demographic dividend window opens and how wide it opens. The dividend does not arrive until children complete their education and enter the workforce. If the fertility rate remains high, the window between one educated cohort entering employment and the next cohort of dependents replacing them is shorter and more demanding. For context, the average TFR of typically approximately 2.1 (shown as a dotted line in the chart to the left in Figure 4) is required for a population to exactly replace itself without immigration, and after accounting for child mortality.

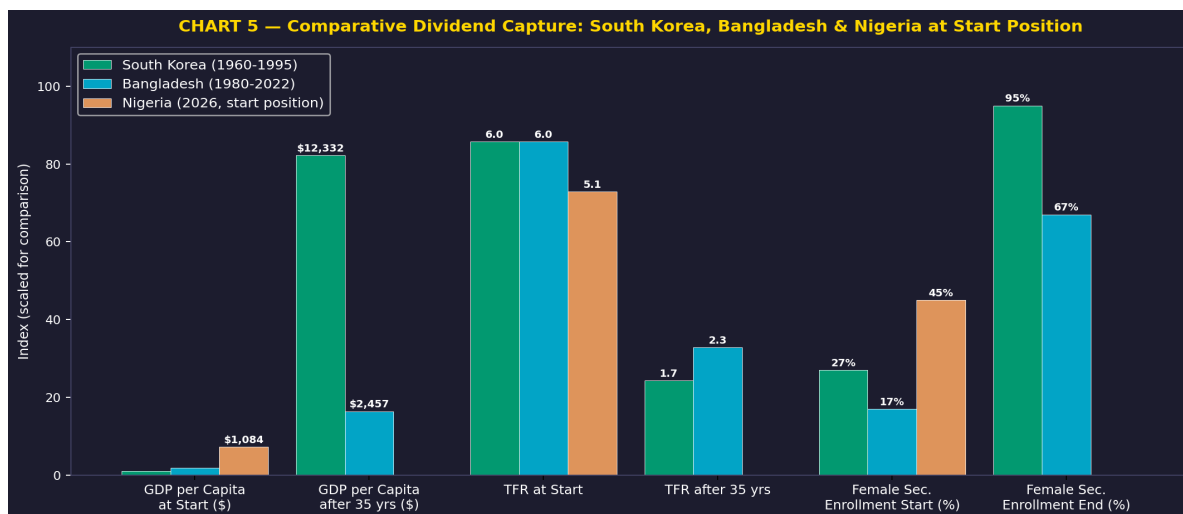
The fertility rate is not uniform across Nigeria. It is highest in the North where girls' secondary enrollment is among the lowest in the world, child marriage rates are highest, and where a girl who marries at sometimes below 15 (fifteen) will have her first child at 16 (sixteen) and her sixth by 30 (thirty). In Kano, Sokoto, and Zamfara states, average total fertility rates of 6 (six) and 7 (seven) are recorded. In Lagos and Abuja, by contrast, urban professional women are having 2 (two) and 3 (three) children, reflecting the same education and opportunity effects that drove the demographic transition in East Asia. Nigeria does not have a single demographic challenge. It has two different scenarios, in the same country, and the most severe is concentrated in the North which is also, not coincidentally, the region of highest insecurity, lowest educational attainment, and greatest economic marginalisation.

Table 2 represents a summary of how the dividend was captured in the east Asian with lesson learnt from differences at start and end positions used as pathway for Nigeria to follow from 2026. Table 2 and Figure 5 compare Nigeria with South Korea and Bangladesh at the beginning of their journey. The table and figure show their relative GDP per capita, TFR and Female secondary enrollment.

Table 2: Key indicators in Countries and periods

Country/Period	Key Indicators
South Korea: Start (1960)	GDP/capita \$158; TFR 6.0; Female sec. enroll. 27%
South Korea: End (1995)	GDP/capita \$12,332 (+78x); TFR 1.7; Female sec. enroll. 95%
Bangladesh: Start (1980)	GDP/capita \$275; TFR 6.0; Female sec. enroll. 17%
Bangladesh: End (2022)	GDP/capita \$2,457 (+9x); TFR 2.3; Female sec. enroll. 67%
Nigeria: Position (2026)	GDP/capita \$1,084; TFR 5.1; Female sec. enroll. Approx. 45%
Key mechanism (all successes)	Girls in secondary school → fertility falls → savings rise → manufacturing jobs

Figure 5: Comparative Dividend Capture for South Korea, Bangladesh and Nigeria in 2026



Sources: World Bank WDI; Penn World Tables; UNESCO

Table 2 and Figure 5 show that the demographic dividend has been captured before, in contexts far less favourable in resource endowment than Nigeria's, and the historical record of those captures is instructive. South Korea in 1960 was a war-ravaged,

resource-poor, predominantly agrarian economy with a GDP per capita of approximately \$158 which is lower in real terms than several sub-Saharan African countries at the time. It had no oil, no significant mineral endowments, and no natural geographic advantage comparable to Nigeria's. What it had, among others, was a government that made a deliberate, sustained, and well-financed commitment to universal secondary education, combined with an industrial policy that created the labour-intensive manufacturing jobs needed to employ the young, educated workforce that education was producing. By 1995, South Korea's GDP per capita had risen to \$12,332 representing a 75 (seventy-eight) fold increase in 35 (thirty-five) years.

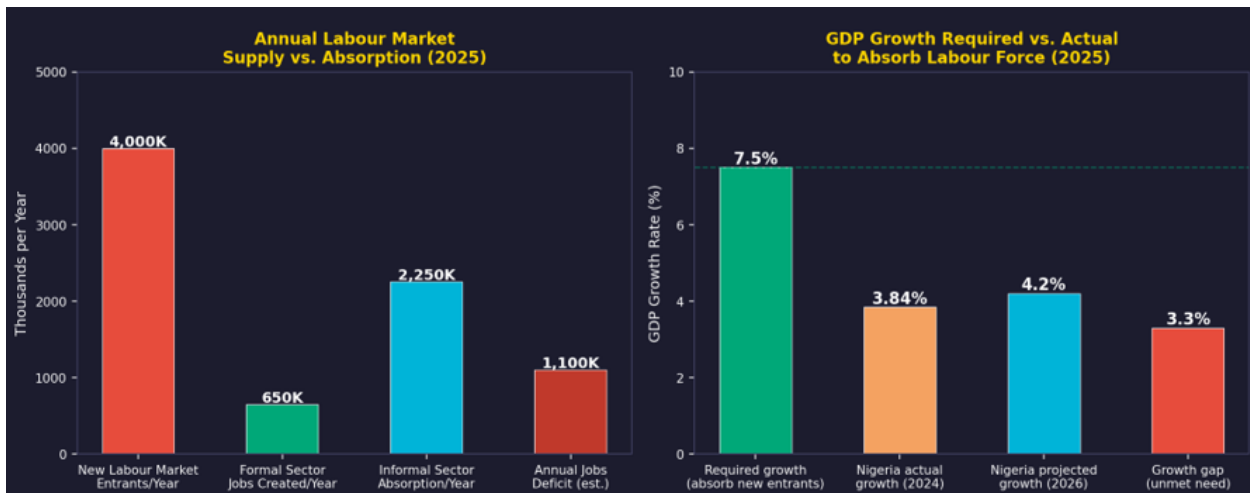
The mechanism is important to understand because it is not simply correlation. The education investment reduced the total fertility rate by raising the opportunity cost of children for women who now had career options. A woman with secondary schooling has on average 1.5 to 2.0 fewer children over her lifetime than a woman without it, translating into a relationship that holds across virtually every country for which longitudinal data exists. Fewer children per family means a lower dependency ratio. A lower dependency ratio means more of the household budget goes to savings and investment rather than consumption. More savings means more capital available for the manufacturing enterprises that employ the educated workforce. The virtuous cycle is real, it is powerful, and it was triggered in South Korea, Taiwan, Singapore, Malaysia, and more recently Bangladesh and Vietnam by the same initial investment in getting girls into secondary school.

Bangladesh is perhaps the most striking comparator for Nigeria, because it demonstrates that the demographic transition can be accelerated even in a low-income, high-fertility, politically turbulent environment if the commitment to female education is genuine and sustained. Bangladesh in 1980 had a total fertility rate of approximately 6.0, a female secondary enrollment rate of 17% (seventeen) percent, and a GDP per capita of \$275. It was, by every conventional measure, a less promising development candidate than Nigeria. It invested heavily in female secondary education, introduced stipend programmes to keep girls in school, and built a garment manufacturing industry that provided formal employment for millions of young women. By 2020, Bangladesh's total fertility rate had fallen to 2.3, female secondary enrollment had risen to 67% (sixty-seven percent), and GDP per capita had risen ninefold. Nigeria has better natural resources, better geography, and a larger domestic market than Bangladesh ever had. It has made different choices.

Turning to the employment arithmetic to provide four million jobs a year in Nigeria, Figure 6 is a combo of 2 graphs of Nigeria's annual labour market population showing new entrants, formal sector absorption on the left panel, and actual GDP growth rate

relative to the required GDP growth rate on the right panel. GDP growth required is based on the employment elasticity of growth of between 0.5 and 0.75 in line with the standard estimate for Nigeria from World Bank and NBS labour market studies.

Figure 6: Nigeria’s Annual Labour Market Gap



Sources: NBS Labour Force Survey 2024; ILO; World Bank; author's estimates

The employment challenge that Nigeria's demographic dynamics create is perhaps the starkest illustration of the gap between the country's potential and its current capacity. Four million young Nigerians turn fifteen every year. They are entering an economy that, by even the most optimistic estimates of formal sector job creation, can absorb approximately 500,000 to 800,000 new formal sector workers annually. The remainder is absorbed into the informal economy: petty trading, subsistence farming, motorcycle taxi driving, artisanal work, street vending — activities that economists classify as employment but that do not build skills, generate savings, pay taxes, or contribute to the productivity growth that structural economic transformation requires.

The official unemployment rate of 3.1 percent on the ILO's modelled estimate is one of the most misleading statistics in Nigerian public discourse. It is computed on a definition of employment so broad that anyone who worked for one hour in the reference week is counted as employed. The National Bureau of Statistics' own broader measure, which includes underemployment, produces youth unemployment and underemployment rates in the range of forty to 45% (forty-five percent). Approximately 13 (thirteen million) young Nigerians aged 15 (fifteen) to (twenty-four) are classified as Not in Education, Employment, or Training (NEETs), a cohort when put in context, is equivalent in size to the entire population of Zimbabwe. The GDP growth rate required to generate sufficient formal employment to absorb Nigeria's annual cohort of new labour market entrants is approximately seven to eight percent per year. Nigeria is currently growing at

approximately 3.9 percent. That gap of three to four percentage points of GDP growth, sustained annually, for at least a decade will not be closed by monetary policy or FX reform alone. It requires structural transformation of the manufacturing base, agricultural value addition, and a digital economy that scales beyond Lagos's top income tier.

The security dimension is a cogent aspect because of the tendency of violence to foreclose demographic dividend. No analysis of Nigeria's demographic dividend is complete without a serious engagement with the security situation because the insecurity that afflicts significant portions of Nigerian territory is not a separate problem from the demographic challenge; it is, in large part, a product of it, and it threatens to become self-reinforcing in ways that make the dividend increasingly difficult to capture. The Boko Haram insurgency in the North-East, which has displaced more than two million people from their homes and destroyed thousands of schools since it began in 2009, is in its origins a story about what happens to young men in a high-fertility, low-education, high-unemployment society when a charismatic organisation offers them purpose, belonging, and income in place of the formal economy that has rejected them. The insurgency is explicitly anti-educational as it has burned schools, assassinated teachers, and abducted students. Approximately 600,000 school-age children in the North-East alone are not in school because of conflict displacement. Every year they remain displaced is a year subtracted from their human capital development, and therefore from the fertility reduction and labour market contribution that the demographic dividend requires of them. Therefore, every year they remain out of school is a year subtracted from Nigeria's dividend window. The bandits of the North-West, a phenomenon distinct from Boko Haram which is more economically motivated and less ideologically coherent, but no less disruptive have turned vast areas of Zamfara, Katsina, and Kaduna states into territories where farming is impossible, markets cannot function, and children cannot attend school safely.

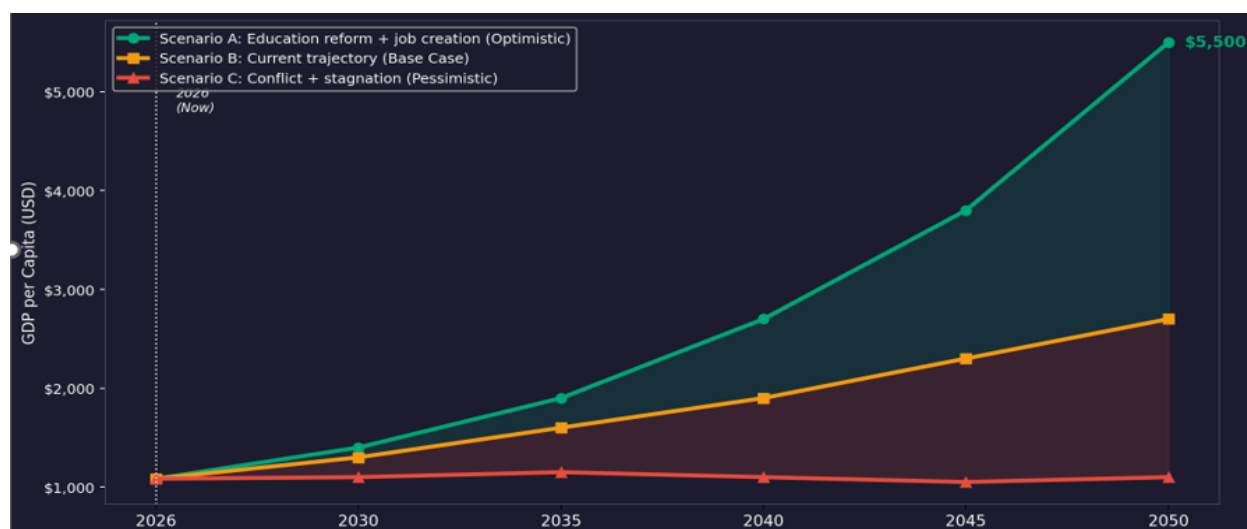
The security crisis in Nigeria's South East has deepened into one of the most damaging sub-national governance failures of the post-2010 period, a slow-burning insurgency that does not fit cleanly into the terrorism classifications applied to the North East but has produced a level of economic paralysis across Anambra, Imo, Enugu, Ebonyi, and Abia states that is measurable and severe. At its centre sits the Monday sit-at-home order enforced by factions aligned with the Indigenous People of Biafra (IPOB) and its armed affiliate, the Eastern Security Network (ESN), a directive that has effectively removed one working day from the region's economy every week since mid-2021. The World Bank and independent economists have estimated the cumulative economic cost of this weekly shutdown at tens of billions of naira annually, with markets closed, schools abandoned, inter-state transport halted, and commercial activity suppressed by a combination of genuine fear and the credible threat of violence against those who defy the order. The South West's security picture is structurally different from that of the

South East but no less consequential for the region's economic trajectory, presenting a layered threat environment in which farmer-herder conflict, forest banditry, highway kidnapping, and urban violent crime operate simultaneously across a zone that contains Nigeria's commercial capital and the largest concentration of middle-class consumption on the continent. The Lagos security situation has its own distinct character, driven by the intersection of cultism, organised street crime, and the social pressure generated by a metropolitan area absorbing an estimated 600,000 new residents annually into a housing and labour market that cannot accommodate them productively: NBS youth unemployment data for Lagos consistently places underemployment among 15-to-24-year-olds above 40% (forty percent), a demographic condition that criminal networks have learned to exploit with considerable efficiency.

The combined effect of Nigeria's security challenges is to compress the geographic and demographic space within which the dividend can be captured, concentrating it in the South and in urban centres. However, the North, which has both the highest fertility rates and the youngest populations, remains the region where the dividend is most needed and least accessible.

Therefore, below is Figure 7 showing the GDP per capita scenarios of optimism, base and pessimism from now till year 2050 considering that the window, the ticking clock, and the choice. The optimism scenario assumes that dividends are captured, the base scenario assumes the current trajectory while pessimistic scenario assumes an environment of conflict and stagnation.

Figure 7: Nigeria GDP per Capita Scenarios up till year 2050



Sources: IMF projections; World Bank; UN WPP; author's scenario modelling

The demographic dividend has a characteristic that distinguishes it from almost every other economic opportunity: it is not only time-limited but irreversible. The East Asian Tigers cannot re-run their demographic transition. South Korea cannot go back to 1960 and redo the investment in female secondary education that launched its extraordinary forty-year growth episode. The window opened, the investment was made, the dividend was captured, and the window closed. There is no second chance.

Nigeria's window is, on most credible estimates, open until approximately 2050 to 2060, the period during which the working-age share of the population will continue to rise relative to dependents. That is a long window by the standards of demographic history, reflecting the current early stage of Nigeria's transition. But it is not an unlimited window. And the actions that determine whether the window translates into a dividend of education investment, fertility reduction, job creation, security restoration require 15 (fifteen) to 20 (twenty) years to take effect, which means that the window for making those decisions effectively has already narrowed considerably. A girl who enters secondary school in 2030, if the school exists and is functional, will enter the labour market in 2036. Her fertility decisions will be made in the 2030s and 2040s. The decisions that shape her educational trajectory must be made now.

The comparison that should haunt Nigerian policymakers is not South Korea in 1960, whose circumstances were distant enough to seem merely inspirational. It is Bangladesh in 1980 having a country poorer than Nigeria at that time, without Nigeria's oil wealth, without Nigeria's agricultural endowment, without Nigeria's strategic geographic position, but chose, deliberately and persistently, to invest in girls' secondary education and light manufacturing employment. And by doing so converted a demographic trajectory that looked like disaster into one that has become a remarkable success story. Bangladesh neither have better geography than Nigeria nor better natural resources. It had better choices, made by governments that understood that the demographic clock was ticking and that the cost of not acting was denominated in the futures of millions of children who would never get another chance.

Finally, recommendations of what must be done to harness demographic dividend in Nigeria is combined in Table 3 as the five-pillar policy agenda as follows:

Figure 3: Policy pillars, Description and Rationale

Policy	Description and Rationale
PILLAR 1: Girls in secondary school	Female secondary enrollment is the master variable for fertility reduction, savings, and labour force quality. Close the gender gap in the North through Bangladesh-style stipend programmes, community incentives, and school security.

PILLAR 2: Quality over quantity in Basic Education	20 million out-of-school children is a national emergency. Invest in teacher training and pay, school infrastructure, and accountability mechanisms. Enrollment without learning is not a dividend; it is a deferred liability.
PILLAR 3: Labour-intensive Manufacturing and Agro-processing	Build the export-oriented sectors that historically absorb large volumes of low-to-medium skilled workers. Nigeria produces the largest cassava crop in the world hence agro-processing alone could employ millions. Industrial policy must prioritise job-intensive sectors, not capital-intensive prestige projects.
PILLAR 4: Managed urbanisation by investing in secondary cities	Urban populations have lower fertility, higher educational attainment, and higher productivity. Invest infrastructures in Ibadan, Kano, Port Harcourt, Enugu, Benin, along the corridor of about 400km East-West Road, and along the new 700km Lagos-Calabar Coastal Highway not only Lagos. Urban infrastructure is demographic policy.
PILLAR 5: Resolve the security crisis	A demographic dividend available in Lagos but inaccessible in Kano is not a national dividend. The girls who should be in secondary school in Zamfara and South East are the teachers, nurses, and entrepreneurs of 2040. Their exclusion is Nigeria's loss, not only the North's.

In conclusion, Nigeria has, in the past three years, been consumed by the macroeconomic emergency of the Tinubu reforms of subsidy removal, the currency unification, the inflation crisis, and the poverty surge with the attendant urgency of that emergency being real. But macroeconomic stabilisation, however necessary, is not a demographic policy. It does not build schools, train teachers, reduce fertility and create the four million formal sector jobs that Nigeria's demographics require annually. It creates the fiscal conditions within which those investments become possible, if the political will to make them exists. The stabilisation is the platform and the investment in human capital is the building that must be constructed on that platform. The building is not yet being constructed at the scale or pace that the demographic clock requires.

Nigeria has those millions of children. It has a demographic window that, on any reasonable reading of the evidence, remains open for another generation. It has, for the first time in years, a macroeconomic framework that is being normalised in ways that could, if maintained, create the fiscal space for the education and employment investments that the dividend requires. What it does not yet have, and what the

historical record suggests is the genuine binding constraint, is the sustained, cross-partisan, multi-decade policy commitment that demographic transition demands. That commitment is not made in inauguration speeches. It is not made in budget documents. It is made in classrooms, in the decisions of individual families across the North and South and East and West of the country, in the career choices of young Nigerian women who see, or do not see, an economy that has a place for them. The clock is ticking and the window is open. The question, as it has always been in Nigeria, is whether the will exists to walk through it.

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