# FUNDAMENTAL STRUCTURAL REFORMS OF AFRICAN ECONOMIES FOR SUSTAINABLE RESILIENCE:
## A Human Capital Perspective

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*ABSTRACT*

*This paper notes that most African countries are structurally vulnerable and widely exposed to both internal and external shocks. These vulnerabilities are traceable to human capital dysfunctions in terms of both suboptimal development and deployment; thence it follows that the fundamental solutions to vulnerabilities lie in undertaking some far-reaching reforms of the observed human capital dysfunctions. The vulnerabilities, graphically illustrated using Nigeria mainly as test case, include: exponential rates of population growth, anaemic economic growth, mass unemployment driving mass poverty, institutional weaknesses, growing deficit in the quality of tertiary education as exemplified by inability to compete effectively in global university rankings, governance deficit resulting in massive corruption, monocultural economic structure with high import dependency, growing macro-volatility along with socio-economic instability recently generated by ill-timed withdrawal of petroleum subsidy and floating of the currency, etc. The proposed ten-point reform towards reducing/eliminating vulnerabilities and establishing resilience includes: massive and sustainable funding of education and health sectors; ensuring merit-based/merit-driven deployment of human capital in all institutions and economic sectors; ensuring macroeconomic stability by focusing on diversification of the real sector, especially through promoting maximum employment-led growth driven with massive investment through promoting transformational entrepreneurs; and setting up of a shock-detection network*

*(SHODEN) in each country to generate early warning signals that can facilitate proactive responses to shocks.*

**JEL classification:** D6, E2, E4, E6, F4, F5, H2, H5

## Introduction

***'Everyone has a plan, until they get punched in the mouth'***

Mike Tyson, 1996

This paper starts by making clarification on three issues in the context of the topic. First, it takes a more holistic view about economic shocks. This will include not only externally-generated shocks but also some internally- or domestically-generated shocks as well as positive and negative shocks. The second point is stating the fundamental, if stylized, fact that virtually all African economies at the present time (2023) are structurally weak and therefore vulnerable to shocks – be they external or internal, positive or negative. The third is my fundamental hypothesis that: *most African countries' economic vulnerabilities are traceable to human capital dysfunctions in terms of both their suboptimal development and deployment.* It therefore follows that the fundamental solutions to the structural weaknesses, hence vulnerabilities of African economies lie in reimagining both the development and deployment of its human capital.

The real challenge about shocks in whatever form is whether and how an economy bounces back for survival at any time or, in the Conference parlance, for 'transformative recovery' from a vulnerable situation after the shock strike. Mike Tyson, the famous American heavy weight boxing champion, nicknamed 'Iron Mike' or the 'Baddest Man on the Planet', in his encounter with Evander Holyfield in 1996, is reputed to have said, as cited above: 'Everyone has a plan, until they get punched in the mouth". To be punched in the mouth is to receive a shattering unexpected blow shock, and whether you survive depends on the robustness of your anticipatory plan. Recall that Mike did not survive the blow!

The prospects of recovery of African economies whenever negatively or positively shocked critically depends on the viability and strength of their extant structural resilience. And by 'resilience' we refer to the capacity to absorb, and transform the economy sustainably. The fundamental question then is: do African economies have the inherent capacity for recovery from shocks and if so, how sustainable are such recoveries? In other words, what structural conditions can ensure absorption and post-recovery resilience with sustainability in African economies?

The underlying assumption in our hypothesis is that human capital is the 'capital of capitals', hence its generic analytical property in addressing most challenges from their root causes (see elaboration in Umo, 1997). We shall seek to validate our hypothesis by reference, mostly to Nigerian data, as this is considered generalizable to other African economies, *mutatis mutandis.*

The paper is in two broad sections. Section I will explore the vulnerabilities characterizing African economies and section II will proffer solutions for post-shock economic resilience derivable from reimagined development and deployment of human capital.

## SECTION I: VULNERABILITIES OF AFRICAN ECONOMIES

### 1. Some Stylized facts on the Vulnerabilities of African Economies[1]

Most African economies have been rendered weak by the presence of some debilitating problems. Such problems include;

- high rate of population growth and age imbalance;
- anaemic economic growth;
- mass unemployment;
- mass poverty,
- institutional weaknesses,
- poor governance structure as reflected in cases of endemic corruption,
- monocultural economic structure;
- high import dependency,
- growing budget deficit caused by declining fiscal space;

[1] Some of the materials in this section draw from Umo, 2023a.

- growing socio-economic instability caused by ill-advised and ill-timed sectoral (meso) and macroeconomic management;
- emergence of terrorism, etc.
- political instability, sometimes leading to civil war;
- breakout of health pandemics like COVID-19, Ebola, and HIV/AIDS
- Externally-generated financial crises.
- External wars among big global economic and political players.

Efforts to generate extant data for illustrating the existence of the above fifteen debilitating challenges in each of the 54 African countries would take a very long time. Suffice it to accept the facts of their existence (although in differing degrees for each country) rather than live in denial of their existence. A few illustrations using Nigerian and a few accessible data from other African countries will suffice to establish the facts of their existence.

## 2. The Case of High Population Growth Rates and Imbalance

With a UN/ Worldometer estimated population of 221million (2023), Nigeria is one of the fastest growing countries, not only in the African continent but in the world. It is now the largest country in Africa, and it is estimated that by 2050 (i.e. in 27 years time), its population would have doubled in size to about 442 million. Nigeria will then be the third largest country in the world, after China and India, and its population will exceed those of Brazil, Pakistan, Indonesia, and the United States (See https:// www.thecable.ng/Nigeria-population-time-bomb/amp).

Three countries with the highest population growth rates in Africa are: Niger (3.8%), Angola (3.3%) and Burkina Faso (3%). So, on the average, it will take just 21 years for their populations to double.

Nigeria's population pyramid which is typical of most African countries is as shown in Figure 1. The age and gender structure of the population pyramid are of great analytical interest. The age structure reveals that the country has a youthful population as about 75 percent are aged 35 years and below. This age structure is typical of most African countries. Second, the population of females is almost at par with that of males, and this is also the case in most African countries.

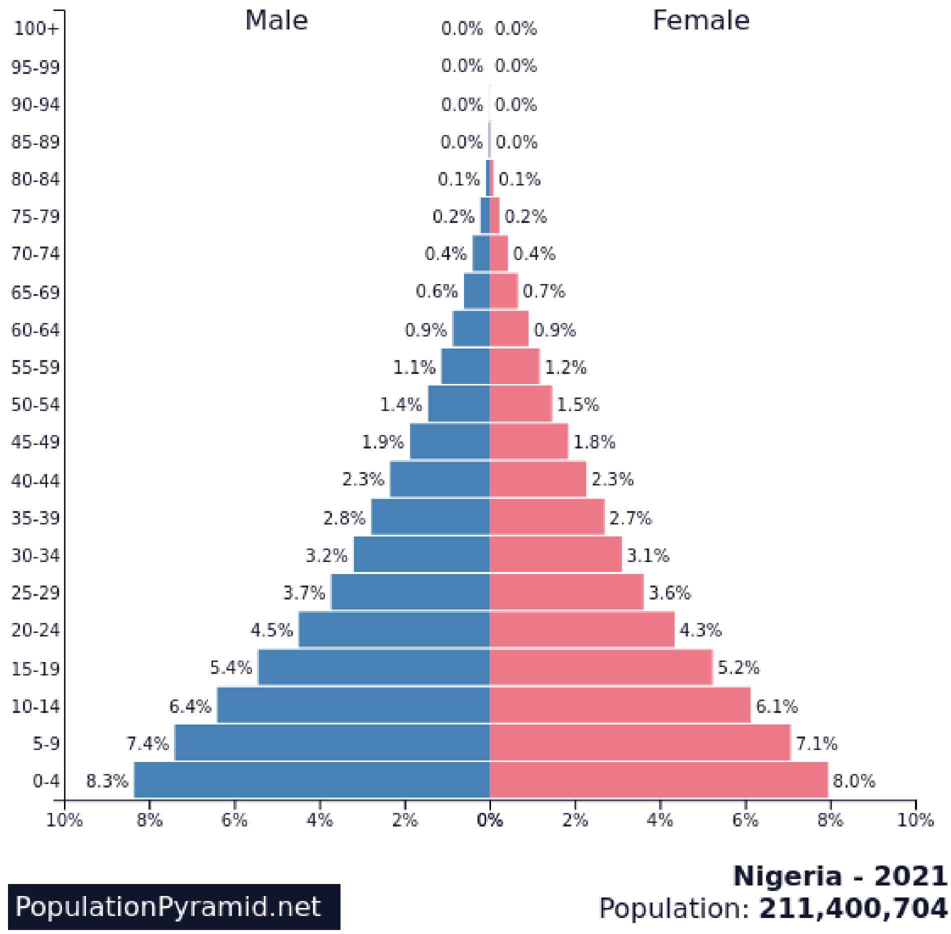


**Figure 1:** Age structure and gender composition

*Source:* https://www.population pyramid.net nigeria>

The development implication is that if these two features are leveraged, as will be shown in the policy segment, Africa has what it takes to achieve resilience in the event of shocks, whether internally or externally generated.

At present, they constitute sources of weakness since the growth rate of Nigeria's population (2.4%) is greater than its economic growth (1.1% ). Meanwhile Africa's population (1.46 billion in 2023), with the high growth rate of 2.37 percent is set to double to 4.2 billion by 2100 (See https://saisreview.sais.jhu.edu>how).

## 3. The Case of the Growth of the Nigerian Economy

The historical growth of the Nigerian economy, which to a large extent mirrors the growth experience of most one-commodity (monocultural) economies in Africa, is depicted in Figure 2 below for a period of 54 years. This length of time has exhibited some interesting features relevant for economic resilience.

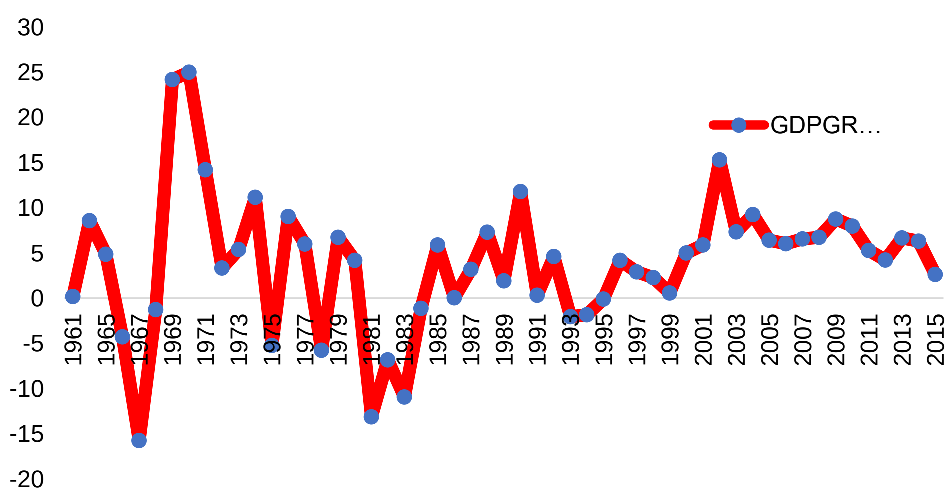


**Figure 2.** Nigeria's GDP Growth Rate (GDPGR) 1961 - 2015 (%).
*Sources:* National Bureau of Statistics and Central Bank of Nigeria statistics, several issues.

Five growth regimes can be discerned from the above growth profile:

1. *The Civil War growth era (1966-1969)*. During this period a negative growth (-7%) was registered for the obvious reason that the war disrupted production. Despite the negative growth, it is heartening that the Nigerian economy was so well managed that it ended the war without incurring any external debt!

2. *The Post-Civil War growth rate (1969-1974/75).* Growth was in double digits (13.89%). This growth regime which can be described as the 'golden age' demonstrates that Nigeria is capable of double digit growth if the conditions are right — export driven growth in a regime of relatively good governance and diversified economic structure.
3. *Erratic growth era (1985-1991).* The growth rate averaged 4.57 percent in eight years. The erratic picture is a clear depiction of the international fluctuations in oil price — Nigeria's mono-product during this era.
4. *Era of Stable Growth (2002- 2014).* The country registered a relatively stable growth of 6 percent (over 12 years) but lost the opportunity of leveraging this into an inclusive /employment-led growth. This was due to poor planning and implementation in an era of growing governance deficit.
5. *Era of Growth Struggles (2015 to date).* Available data and anecdotal evidence show that since 2015, Nigeria's growth has been struggling, averaging about 1.1 percent. This is attributed to series of shocks ranging from global recession, through COVID-19 pandemic economic disruptions to domestically-induced shocks like disruptions caused by terrorism and ill-advised/mismanaged macroeconomic policies. The latest of these include: withdrawal of the petroleum subsidy and the floating of the local currency, the effect of both can precipitate a long period of runaway inflation/hyperinflation if not rationally and aggressively tackled.

It is clear that any economy that exhibits the low and unstable growth profile depicted above stands very little chance of surviving shocks, let alone bouncing back transformatively. This suggests that the first priority in the search for economic resilience is to attend to key variables that affect the production and growth of the economy.

## 4. Unemployment Profile

Unemployment is one of most disruptive socio-economic crises that Nigeria has been facing over the last five and a half decades. The unemployment rate remained at low single digits between 1985 and 1998, but since the beginning of the second millennium, it has been growing in double digits. Figure 3 clearly shows the official unemployment rates between 1985 and 2018.

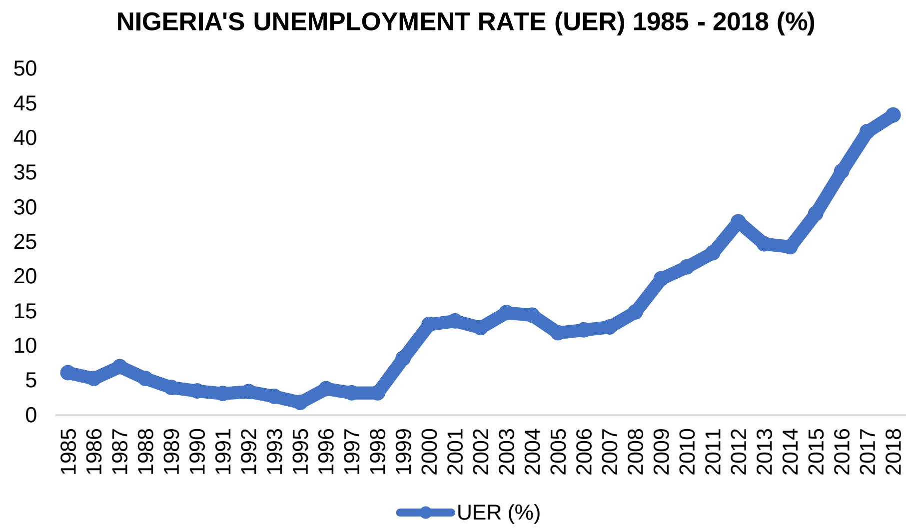


**Figure 3:** Unemployment rates (1985 – 2018).
*Sources:* National Bureau of Statistics (NIBS), and Central Bank of Nigeria Statistics (several issues).

As Figure 3 shows, the single digit growth in unemployment morphed into double digits from 2000 when it registered 13 percent. It grew into higher double digits from 2010 when it registered 21.4 percent before reaching 43.3 percent in 2018. At this point this official rate of unemployment translates into 27 million people from a labour force of 62 million people. The unemployment rate has been growing exponentially because of the apparent failure of all the employment policies as well as the fundamental failure of economic growth to generate employment. The economy has been facing long term de-industrialization. Both the underlying solution concepts and their implementation have been problematic (see elaboration in Umo, 2023b).

It is important to however observe that the official unemployment figure in Nigeria grossly underestimates the problem because it is yet to be adjusted to the peculiarities of the Nigerian labour market. The true employment crisis that the country is facing leaves out several components of what I consider to be *human capital wastage*. A more realistic picture of human capital wastage (HCW) can be captured after the following elements would have been included in the (un)employment survey (Umo, 2023a).

Human capital wastage (HCW) is made up of the following elements.

- Open unemployment (as measured by NBS, 43% in 2018)
- Underemployment (measured as 33% by NBS).
- Unmeasured discouraged jobseekers (runs into millions after decades of school out-turn into a continuously saturated labour market)
- Low wage workers, especially in the public service
- Low productivity workers, especially in the informal economy - 90 percent of operators are in the informal economy
- Partly-employed (temporary) workers in the growing gig economy (unmeasured);
- Disabled people (only an estimated negligible (4.2% of 25 million disabled people get jobs)
- Official part-time unconfirmed workers (in millions as the economy nosedives)
- Unemployable graduates (an estimated 85% of out-turn from tertiary institutions because of inefficient educational system).

When the above elements of human capital wastage are surveyed and rigorously quantified, it will be clear that the open unemployment data that inform official employment policy in Nigeria constitutes a drop in a big bucket!

The direct consequences of mass unemployment in Nigeria are the generation of mass poverty hence the mass social vices the nation is currently facing.

From the perspective of economic resilience, it should be noted that any economy with mass unemployment is a catastrophically weakened economy. This is because with mass unemployment, such an economy generates mass poverty, which in turn loses the capacity for generating tax revenue, growing the economy through high productivity, and standing against social vices like corruption, criminality, recruitment into cultism, political thuggery and terrorism.

## 5. Poverty Profile

Poverty has been described as 'the greatest dark afflicter of humanity' (Otteson, 2021). Going by this, mass poverty has disrupted the lives of Nigerians massively. The disruption in the country's socio-economic sphere has been palpable. Like its cousin, mass unemployment, poverty has contributed to all types of social vices in Nigeria. These range from kidnapping, through armed robbery, child trafficking, corruption, prostitution, to insecurity and domestic terrorism. The increase in poverty incidence has driven the increase in these vices.

Official statistics for poverty incidence in Nigeria from 1980 to 2019 (39 years) are shown in Table 1. As the table demonstrates, poverty incidence increased from 17.7 million in 1980 to 130 million in 2016, a 73.4 percent increase in 36 years. This suggests that official poverty-reducing policies failed as the population increased. In other words, poverty is increasing exponentially with population increase as well as the policies adopted to address them. The current (2021) estimated multidimensional poverty by the National Bureau of Statistics (NBS) is 133 million, which translates to 60 percent of Nigerians in poverty.

**Table 1:** Poverty Incidence in Nigeria (1980 – 2019)

| Year | Poverty Incidence % | Total Population (millions) | Population in Poverty (millions) |
|---|---|---|---|
| 1980 | 27.2 | 65 | 17.7 |
| 1985 | 46.3 | 75 | 34.7 |
| 1992 | 42.7 | 91.5 | 39.2 |
| 1996 | 65 .6 | 102.3 | 67.1 |
| 2004 | 54.4 | 126.3 | 68.7 |
| 2010 | 69.0 | 163.0 | 112.5 |
| 2016 | 67.6 | 193.4 | 130.7 |
| 2019 | 40.0 | 200.0 | 80.0 |

*Source:* National Bureau of Statistics (NBS) HNLS 2010 and Socio-economic Profiles (2016).

Poverty statistics in Nigeria remain a controversial subject, especially among politicians who claim, without proof, that they have done 'a good job' because a lot of resources have been poured into poverty fighting efforts. In my book, *Escaping Poverty in Africa* (2012), I drew attention to Nigeria's exceptionalism in the African poverty record. The book showed that at that time, poverty afflicted 155 million Nigerians based on the 2012 estimated population of 170 million. This finding, along with the updated data (Umo, 2023) still makes Nigeria the country with the highest concentration of poverty in Africa when it is also considered that Nigeria remains the African country with the highest population concentration.

In 2017, the Brookings Institution in the USA, published that Nigeria is the world's *poverty capital* with a population of 91 million people in *absolute poverty*. It further calculated, through its poverty clock, that six Nigerians tip into poverty every minute! This is likely to give poverty an exponential growth profile since the policies on ground are not effective in dealing with this type of *run-away poverty*.

The inability/ refusal on the part of policy makers to see poverty crisis as a flipside of the unemployment crisis for more than four decades, clearly accounts for the consistent failure of both poverty and unemployment policies. The need to generate an innovatively strategic policy to address the two crises simultaneously arises and this has been addressed in my forthcoming book (Umo, 2023b, chap.9).

## 6. Inflation

Although inflation in Nigeria since the beginning of this millennium has been well controlled, it continues to pose a present danger in terms of weakening the macroeconomy. See Figure 4 depicting Nigeria's inflation history for 38 years.

After inflation exploded to 73 percent in 1995, it declined to 6.9 percent in 2000. Since then till 2019 (first quarter), its average growth has been 16 percent — still in double digits! At the time of writing this paper, the headline inflation had climbed to about 26 percent. It is therefore clear that all efforts to bring inflation to single digits in the last two decades have been unsuccessful. The efforts have been focused single-mindedly on raising the interest rates through manipulation of MPR (monetary policy rates). These efforts have however failed in the existing Nigerian economic structure and policy environment. The unidirectional MPR approach is pregnant with double jeopardy as continuous increase in MPR translates into unabating increase in interest rates (now ranging between 18 to 30 percent). This has effectively discouraged investment and weakened the growth of the economy by impoverishing people. The negative outcome has been obtained without reducing inflation rate to single digits. This is a sign that something is wrong somewhere, especially with the deployment of the human capital policy component for managing the inflation.

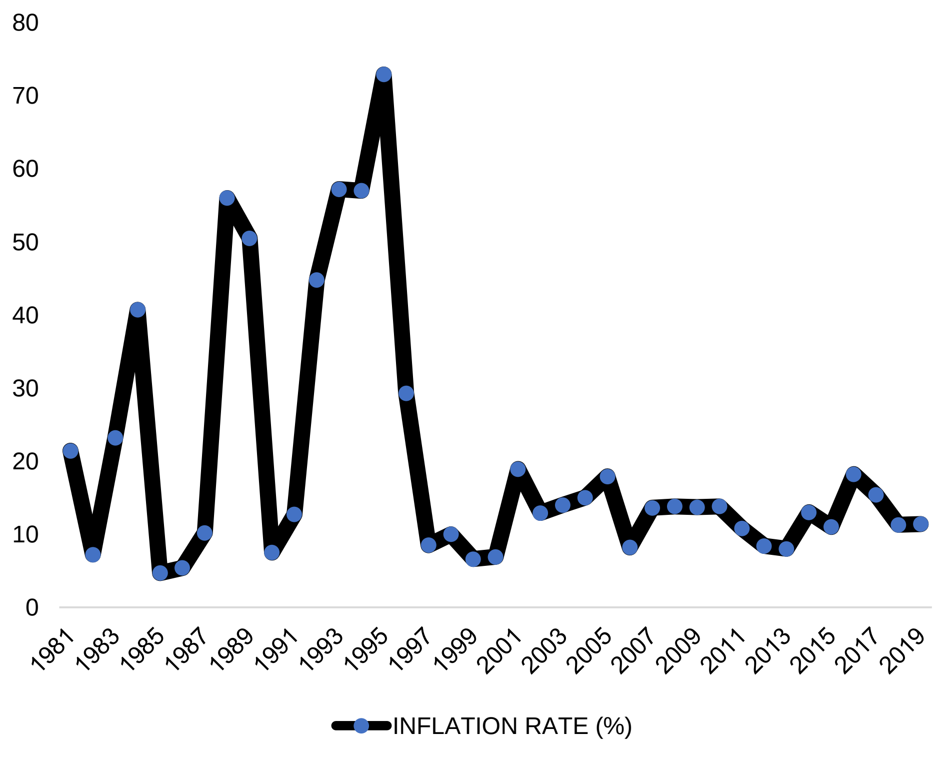


**Figure 4:** Inflation Rate in Nigeria 1981 - 2019 (%)
*Source:* Central Bank of Nigeria Statistical Bulletin

Apparently, the presence of inflation has indirectly weakened the growth of employment by impacting on investment negatively. The alternative route to addressing inflationary pressures through jigging the supply-side of the economy has not been seriously considered and so the resilience of the economy in the face of any shock has been compromised. In the last few months the fire of inflation has further been stoked by mismanaged change of the naira notes, ill-timed removal of petroleum subsidy, and ill-timed floating of the naira exchange rate. The combination of the above forces constitutes an internal negative shock to the economy. The crucial test is whether the economy can survive this shock and if so, how sustainable? .

## 7. Exchange Rate

As an import-dependent economy, a stable exchange rate is critical to the health of the economy. This is particularly important if the economic sector is foreign currency sensitive. The movement of the naira-dollar exchange rate (for 38 years) from 1981 to 2019 is shown in Figure 5.

Since 1981, when the naira-dollar rate was about ₦1 = $1.4 the rate had risen gradually but remained stable until 1999, when one dollar was worth ₦99.0. Since then, the naira eroded in value until 2015 when it was about ₦187 to a dollar. On 20th June 2016, an attempt was made to float the naira and the value climbed to about ₦500 to a dollar at the time. Efforts to stabilize the rate at the pre-2015 level has not been successful as clearly depicted in Figure 5.

However between 2015 and 2019, the frequent intervention of the CBN gradually sustained the official exchange at about ₦307 to a dollar until 2020 when the pressures to float the naira brought it to ₦600 to a dollar (2022). This pressure has been sustained up to the time of going to press (July 2023) with this paper as the market price of the naira is approximately ₦800 to a dollar. From all emerging considerations, its upward march beyond ₦1000/$1 seems inevitable!

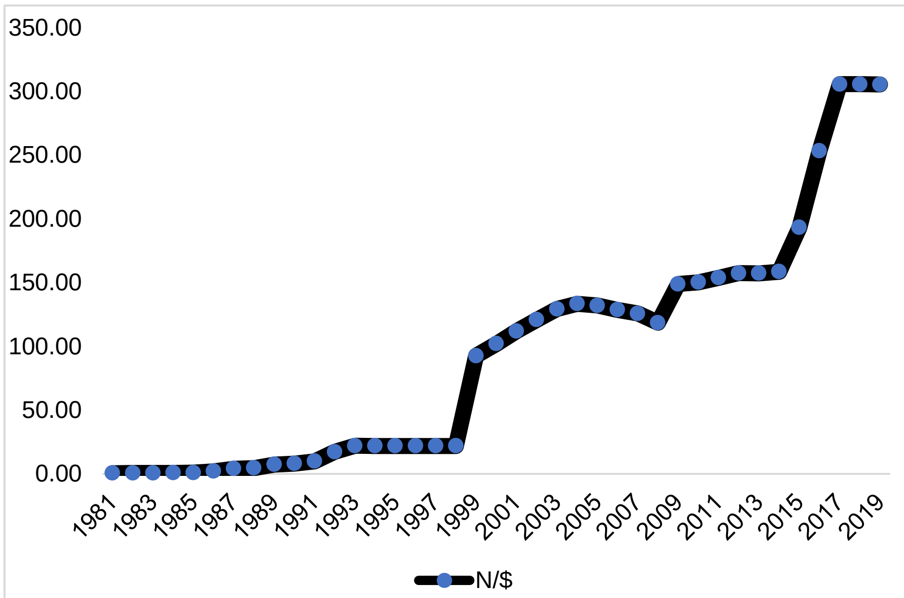


**Figure 5:** Official Naira/Dollar Exchange Rate Progression in Nigeria 1981-2019.
*Source: Central Bank of Nigeria Statistical Bulletin*.

The picture depicting the dance of the naira has communicated one important lesson: and that is that exchange rate management based on the *crawling peg*, which characterized 1981 to 1998 is clearly a preferable option for Nigeria's type of economy, than the adoption of either the so-called 'dirty float' or 'clean float'. This is because the Nigerian economy is highly structurally disarticulated with a collapsed industrial and export sector, therefore, its growth can further be held back by what may morph into hyperinflation.

## 8. The Education Sector

It seems trite to assert that education is a pillar in the growth and development of any economy. This is because it is the source of human capital and innovation that drives development. It therefore provides not only the required manpower the economy needs for development, but also the knowledge base that drives policies, inventions and innovation. From this perspective, it becomes clear that when the educational pillar falls, it brings down virtually all key pillars of development in an economy.

When pillars of development are weakened in an economy, it becomes highly vulnerable in the face of any shock, whether external or internal.

For education to serve as a development pillar, its quality has to be raised high, and maintained at that level. One commentator has rightly observed that the quickest way to collapse a nation is to collapse the quality of its education! African educational sectors are very weak because they operate at sub-optimal quality levels, especially when global comparisons are considered. Let us use as a weakness proxy, the performance of African universities in the global ranking of universities by some prominent ranking systems like QS (Quacquarelli Symonds) and THE (Times Higher Education). The criteria used in the ranking assessment include the following amongst others: teaching, research, research publications and impact, innovation, and international outlook and employment impact. According to QS, the ranking of African universities in terms of both African and global positions were as follows for 2021 (QS. https: // www. top. Universities.com):

1. University of Cape Town (220)
2. University of Witwatersrand (403)
3. University of Johannesburg (439-)
4. Stellenbosch University (456)
5. University of Pretoria (561-570)
6. Rhodes University (801-1000) and
7. University of KwaZulu Natal (801-1000)

Of the first ten best universities in Africa ranked by QS, within the brackets of 220 to 8001 in 2021, seven of them were universities from South Africa. The remaining three were from Egypt, namely:

8. The American University, Cairo (411)
9. Cairo University (561-570) and
10. Ain Shams University (801-1000)

No African university was found among the first global 100, and none of Nigeria's 200+ universities made the list of the first ten within Africa.

In the updated 2023 QS global ranking, no African university was found in the first global 100; only three South African universities made it within the 170-300 categories, and most disappointingly, no Nigerian university made the first 1000 in the ranking of about 1500 universities.

The ranking of the ten best African universities by THE, within their respective brackets in 2021 was as follows:

1. University of Cape Town (160), South Africa (SA)
2. Stellenbosch University (251-300), SA
3. University of Witwatersrand (251-300) SA
4. University of Cape Coast (351-400), Ghana
5. Aswan University (401-500), Egypt
6. Ferhat Abbas Setif University (1), Algeria
7. University of Ibadan (401-500), Nigeria
8. University of KwaZulu Natal (401-500)
9. University of Lagos (401-500), Nigeria and
10. Muhimbili University of Health and Allied Sciences (401-500) Tanzania

In the THE ranking, South Africa continued to dominate in the first 300 bracket, but Nigeria was able to join with two universities, while Ghana, Egypt, Algeria, and Tanzania had one each.

The key question arises: Why do African Universities in general and Nigerian ones in particular lag behind in the global ranking game. The answer is NOT that African scholars lack what it takes intellectually to excel but that they are not given the enabling environment to be competitive. The direct brief, albeit incomplete answer, is to be found in *gross underfunding* of most, if not all the African universities. Funding of Nigerian universities is depicted in Figure 6, showing long-term gross underfunding.

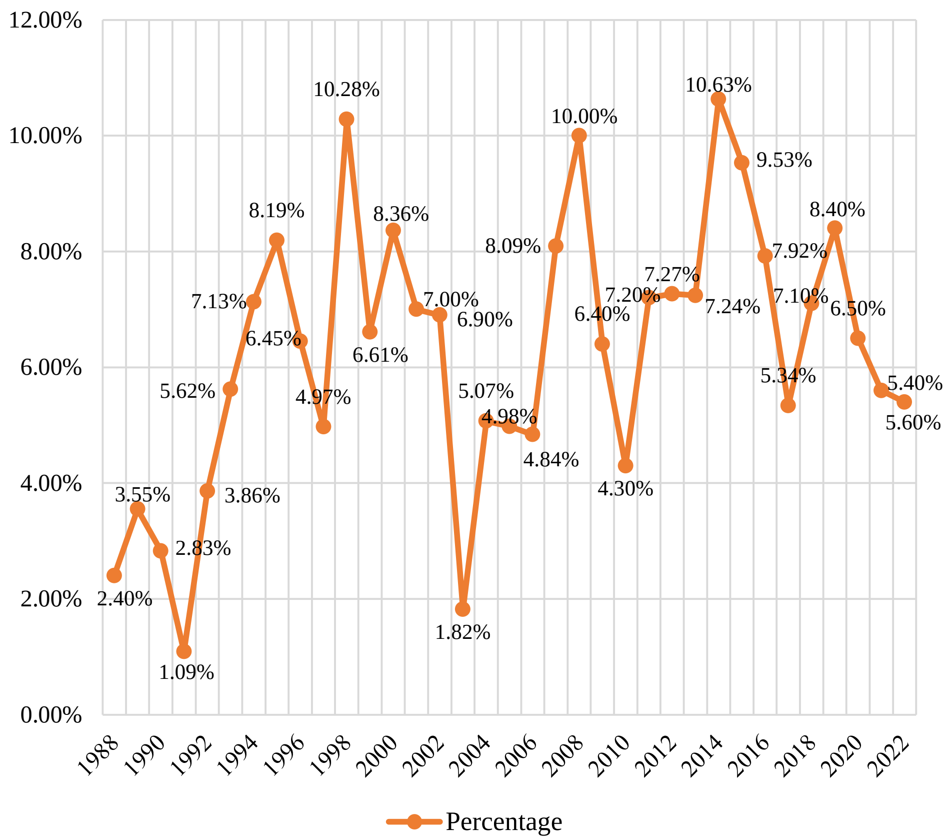


**Figure 6:** Budget Funding of Nigerian Education 1988-2002.

*Sources:* Author's compilation with data from National Bureau of Statistics, Federal Ministry of Education and Central Bank of Nigeria.

The following features are worth noting in the data profile presented in Figure 6.

- Allocation to education was generally low; ranging from 2.4 percent in 1988 to the highest point of about 10 percent, only for three years: 1998, 2008, and 2014.
- It is clear from the above that the budget allocations were far below the UNESCO prescribed minimum of 26 percent of the budget.

- More interestingly, the annual allocations were characterized by volatile swings, making it impossible for the sector to embark upon any meaningful/ rational planning
- Anecdotal evidence abounds to show that most of the allocations were not fully drawn down since governance deficit characterized the sector as in other departments of the public sector.

### 8.1 Education-GDP expenditure

Theoretically, education-expenditure-GDP ratio shows the actual commitment that all sectors make to education including the federal government, state governments, and the private sector, as education is in the concurrent list of the Nigerian Constitution. However, as the data profile Figure 7 demonstrates, Nigeria's commitment to education from all the sectors leaves much to be desired.

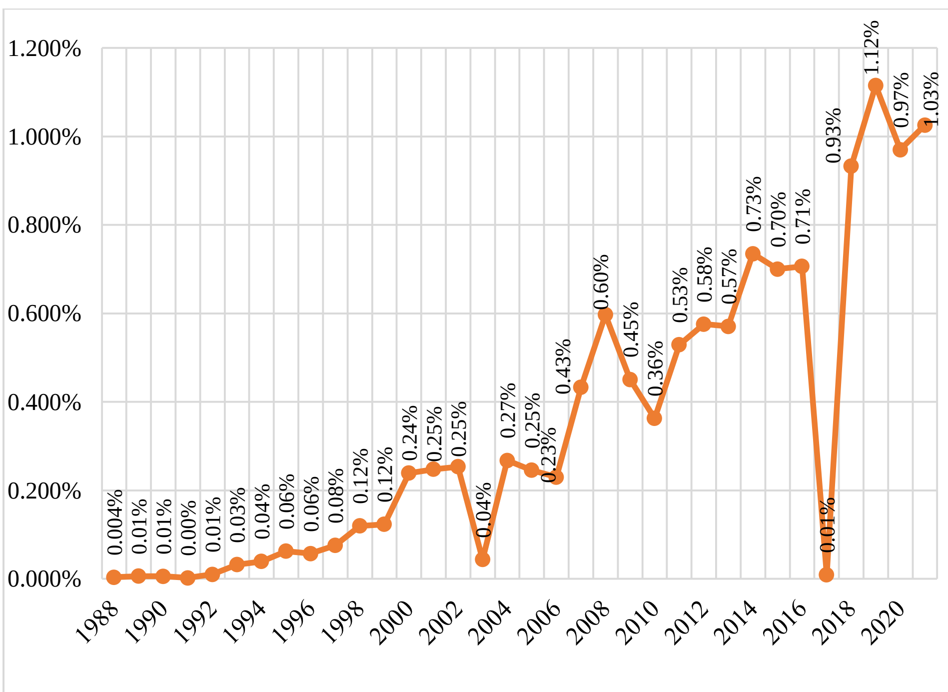


**Figure 7:** Education Expenditure-GDP Ratio in Nigeria (1988-2022).

As Figure 7 depicts, education expenditure-GDP ratio was below 0.05 percent in 1988 and struggled to move to 0.95 percent in 2019. This of course shows that when the education-GDP ratios of comparator countries like Ghana (falling from 8 percent in 2011 to 4 percent in 2018) and South Africa (6.5 percent in 2019) were tacked up with Nigeria's, the country's commitment to education looks like a joke! This remains a fact, in spite of the loud rhetoric that some politicians make about the importance they attach to education. Unfortunately, building several universities does not translate into quality university education or learning, since education is more than structures, no matter how beautiful they are.

Funding of education in Africa in general has been problematic and this largely explains why the continent's universities are lagging behind in offering the strong pillar essential for making the economy resilient in the face of external and internal shocks.

What is more concerning is the mis-deployment of human capital and generalized underappreciation of their role in development. These are reflected in low public service salaries, allowing for frequent strikes in the academic sector, increased brain drain, etc. These are the outcomes of low quality education that puts Africa in a weak technological position in terms of ability to borrow or leverage available innovation and technologies.

## 9. Weakness of the Health Sector

Another important component of human capital is health. Here the conventional wisdom that 'health is wealth' applies strongly. At the individual level, a sick man is often not in a position to take a shock from any illness, and depending on the nature of the attack, may find it impossible to bounce back. In some cases the attack may spell the end of life. And so it is with the national economic health.

Given the importance of health as a key component of human capital, it is disheartening that most African countries treat its budgetary commitment with absolute levity.

Consider as a typical example, the low commitment of the Nigerian government to health as reflected in the annual budget shown in Figure 8.

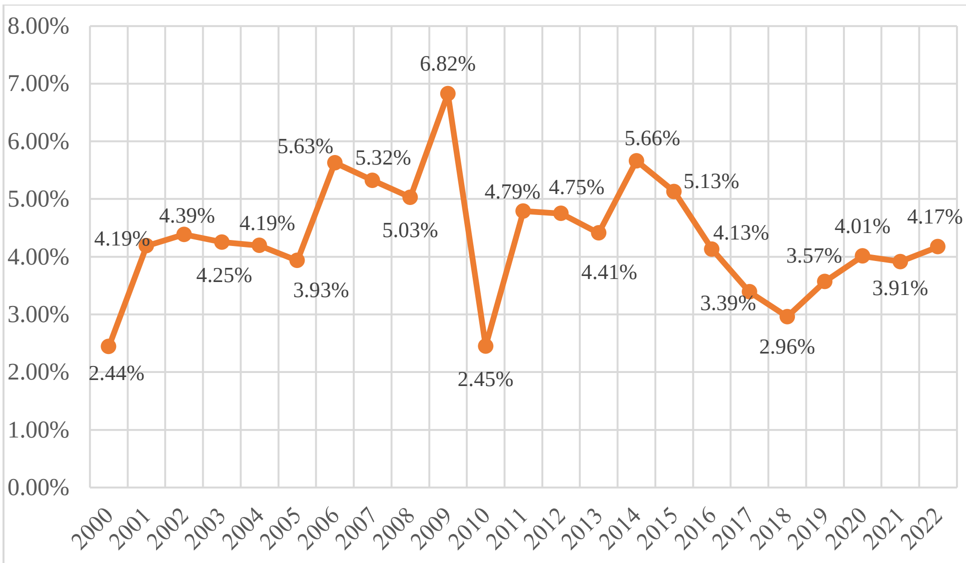


**Figure 8:** Health Budget Allocation in Nigeria 2000-2022.

Figure 8 tracks federal government expenditure on the health sector in Nigeria from 2000 to 2022 and the key features can be shown as follows:

- The allocation ranged from 2.44 percent of the budget in 2000 to its highest of 6.8 percent in 2010. It has since fluctuated between 2.45 percent and about 4 percent.
- This level of allocation is scandalous when seen in the context of the recommended 15 percent of the national budget to health at the 2001 meeting of heads governments of the African Union at Abuja and the same gathering later under the 'Maputo Affirmation' in 2003. About 20 years down the line, Nigeria's allocation has consistently remained at about 5 percent or less even though her population is growing. Only Rwanda, Botswana, and Zambia have met these AU declarations.

## 9.1 Health expenditure-GDP ratio

Another way of assessing the country's commitment to health is to examine the profile of its health expenditure-GDP ratio. This is tracked for 21 years in Figure 9.

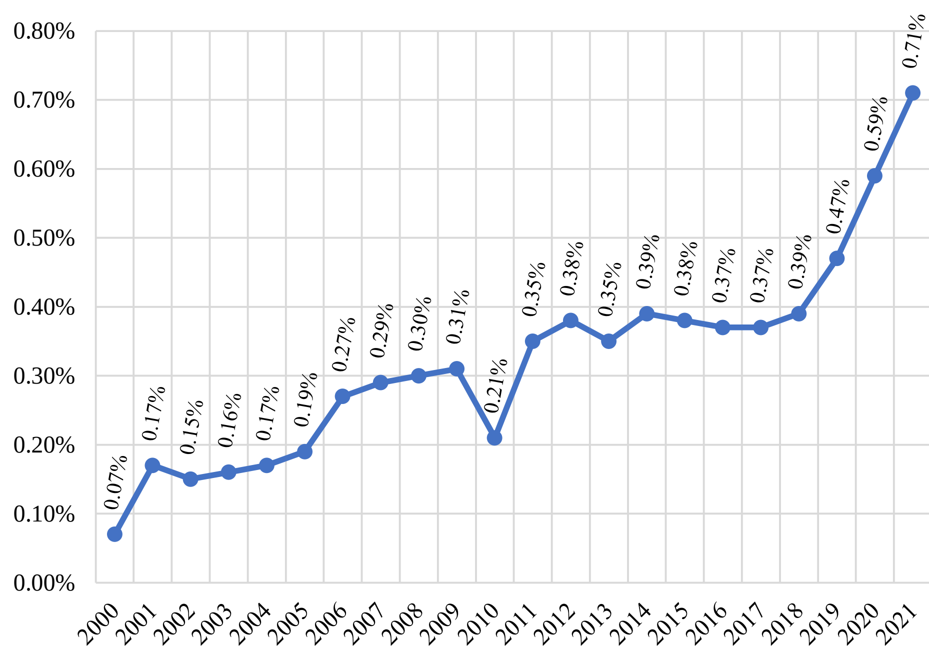


**Figure 9:** Health Expenditure as a Percentage of GDP in Nigeria, (2000-2021).

As Figure 9 clearly shows, the health GDP expenditure in Nigeria was a mere 0.07 percent in 2000, and this rose gradually to 0.71 percent in 2021. It is scandalous that Nigeria has never spend up to 1 percent of its GDP on health services in any of the years in the last two decades.

Grossly inadequate funding of the health sector has weakened the sector's responses to health event shocks like the recent COVID-19. It also reflects in its poor response to regular health issues. This is reflected in the following, to name just a few:

- Low life expectancy metric: average of 53 years in Nigeria: which is below the African average of 68 years or developed countries average of 78 years;
- Poor health infrastructure for over 200 million people; and lopsided concentration in urban areas to the detriment and neglect of rural areas;
- Poor households spend about 70 percent of their income on health issues;
- Increase in health quackery leading to many deaths;
- Promotion of health tourism abroad and the consequent neglect of building quality health facilities locally. This has substantially drained the nation's scarce foreign exchange. In 2018, for instance, the amount spent on health tourism (₦359.2 billion) was more than the budget allocated to the entire health sector (₦340.45 billion).
- WHO has listed ten avoidable common diseases which are killing Nigerians; and they include: malaria, HIV/AIDS, and stroke, etc.
- Increasing brain drain of expensively trained health manpower, including medical doctors, pharmacists, and nurses. This is due to inadequate employment incentives, and poor working environment and facilities.
- Inadequate response to health emergences like COVID-19 pandemic of 2020-2022. Nigeria recorded over 3000 deaths; this figure would have been far lower had there been enough facilities for testing and vaccination.

The existence of health problems in the economy means that productivity is seriously undermined, and when any shock comes it will be difficult to recover and bounce back. Unfortunately, health statistics which would facilitate the assessment of the productivity loss attributable to poor health human capital are unavailable. The non-existence of such statistics hides the truth concerning the damage caused by neglect of health funding by policy makers.

### 10. Some Internally-generated Policy Shocks

Some of the economic shocks are domestically generated, and these should not be ignored since their impacts are even more consequential than the externally-generated shocks. Since they can weaken the very foundations of the domestic economy, they further make recovery from external shocks impossible or extremely difficult. Historically, and even contemporaneously, the Nigerian economy has been prone to such internally-generated shocks. Examples include the following:

1. The Udoji public salary awards of the mid-1970s which threw the economy into a high inflationary spiral that lasted until 1976 when the military struck again.
2. The Structural Adjustment Programme (SAP) of the mid-1980s. This brought about generalized poverty and unemployment. The National Directorate of Employment was set up in 1986; this was part of the measures to cope with the resulting misery.
3. The various episodes of oil windfalls since the seventies. The prominent ones include the oil windfalls of 1974/75, 1979/80, 1990/91, and 2012-2007. These were positive shocks which unfortunately were mis-managed resulting in the debt burden which was cleared in 2004.
4. Change of naira colour/ currency replacement shock of 2022/23.
5. Petroleum subsidy withdrawal coupled with the floating of the naira exchange rate (starting in June 2023. This was ‘a double whammy’ shock which impact may move the economy into a hyperinflationary trajectory, if not immediately and rationally addressed. Recall that the standard benchmark for hyperinflation is 50 percent!

Each of the above incidents carried with them negative economy-wide/ general equilibrium impact that served to weaken not only the economic structure but the economic agents as both producers and consumers. Since these, on hindsight, were avoidable policy mistakes made by human agents (from all categories) who either lacked the foresight and/or competence to take the right decision or who intentionally took the decision in furtherance of some preferred but irrational agenda, in this case, the proverbial square pegs that had been assigned to the round holes, the correct socially desirable outcome would have happened only by a miracle. But miracles do not build economies! Only rational development and deployment of human capital offers the ultimate solutions to the challenges of building resilience in preparation for any shock in the economy. The question then is how optimal human capital can be built/developed and deployed to address the various vulnerabilities identified in African economies. We devote the next segment to addressing some of these critical issues.

## SECTION II: ON THE WAY FORWARD – FUNDAMENTAL REFORMS FOR POST- SHOCK ECONOMIC RESILIENCE

Given our working hypothesis that the observed vulnerabilities in African economies are basically traceable to human capital dysfunctions, in terms of both development and deployment, the entry point to fundamental structural reforms for achieving economic resilience, must necessarily start from highlighting practical human capital-related elements. The reason for this is that “human capital when conceptualized as ‘the capital of capitals’ has the generic analytical property affecting virtually all policies, programmes, projects, and institutions (Umo, 1997; 2023a).

Both the importance and the cross-cutting nature of human capital have often been ignored, in most policy analysis, planning and implementation. This largely accounts for the observed inadequate appreciation of human capital and the associated numerous policy failures. What then are the key policy reform initiatives that need to be addressed in the context of building fundamental resilience for absorbing shocks and recovering transformatively from them. This should be the case irrespective of whether the shocks are external or internal, positive or negative. It should be recalled that building resilience basically boils down to taking measures to strengthen the weak structures of the economy. This is because when an economy is strong structurally, it is unlikely to collapse (under attack) and its recovery from shock would give it the opportunity to transform sustainably. The following are some of the priority measures — more illustrative than exhaustive — relevant to Nigeria and other African countries when properly adjusted.

1. Address the challenge of high demographic growth rate as well as the youth bulk in the African population. Leveraging the demographic youth dividend in the population as well as reducing the high growth rate to the standard replacement rate (of 2.1 children per woman). This can be attained by ensuring mass quality education to the general populace and creating opportunities for employment, especially for women. These policies are all backed up by solid analytical and empirical evidence that show the ineffectiveness of the traditional family planning. These studies have shown for instance, that the demographic dividend implied in the youth bulk in the population pyramid can be leveraged by taking measures to increase the quality of education of the youth and increasing their economic opportunities. And that increasing the education of women and ensuring their employment is the most effective way to ensure **population control or/and reduction in grow rate** (Todaro and Smith, 2013; for Nigerian application, see Kokoette, 2021, chapters 5 & 6).
2. Given the well-documented symbiotic relationship between unemployment and poverty and the repeated failures of extant policies in Africa, it is high time for a new strategy to be deployed. This is the innovative policy triad comprising, i) empowering a critical mass of *transformational entrepreneurs (TEs)*[2] (Decker et al., 2014) for investment in all key sectors of the economy, ii) promoting massive TE-led investment for poverty-reducing employment (IPRE) paradigm, and iii) creating an environment of full/maximum employment-targeted macroeconomic stability, driven by supply-side policies (see elaboration in Umo, 2023b).
3. Education is widely acknowledged as a development pillar and by implication a pillar of resilience in all modern economies. Its failure to assume this role in African countries can largely be attributed to underappreciation of this role, hence the gross underfunding and

[2] A *transformational Entrepreneur* is one whose attributes of creativity and innovation drive the focus on the growth of the company; and this is the type of enterprises that can generate both jobs and wealth in the economy. See elaboration and distinction with the so-called peasant entrepreneurs in Decker et al., 2014.

mismanagement the sector has experienced over the years. The performance of African universities in global ranking shows that African scholars have what it takes to be globally competitive if only the African funding environment were supportive. The case for radically increasing the funding profile of education in Africa with a follow up with strategic planning cannot be more compelling. It needs to be recalled that Singapore, a once Third-World country that moved to join the modern First World group, allocated 33 percent of its budget to education consistently for 30 years. The reform strategy should additionally, pay attention to the critical key sectors like **Science, technology engineering and mathematics (STEM)** and developing *transformational entrepreneurship.*

4. The recent COVID-19 global pandemic has been an epiphany, revealing the weakness of Africa's health human capital. Although for reasons yet unknown to science, Africa had been spared the worse impact of the pandemic, compared to other world regions, it has laid bare the fact that Africa's extant health sector infrastructure (physical and human) cannot absorb the strain of attack by several diseases. The continent's low average life expectancy summarizes the state of health environment. The fundamental solution lies in radical increase in funding and rational deployment of its health human capital.
5. Strengthen all key national institutions by rationally engaging the proverbial best and the brightest (BAB) from any part of the country/continent to work for Africa. If Africa is to make progress in the global context where shocks can emerge anytime, the policy of allocating human capital based on the principle of MERIT by *putting the proverbial round pegs in round holes* should not be compromised. Merit in this context should be widely interpreted to include both technical and ethical elements. This is very basic and should be applied in all sectors of the economy—from economics to politics. We have all by now experienced the disastrous results produced when round pegs are driven into square holes! The result has always been an invitation for collapse and chaos in the face of any shock. The past national experiences in nearly all African countries attest to the violation of this principle.

6. Diversify the export base of the economy as the key strategy of managing the exchange rate. In the Nigerian context, exports can be boosted by fighting oil thefts and the blowing up of gas pipelines. The latter has put Nigeria under *force majeure* as it fails to meet earlier obligations to subsisting customers, talk less of taking advantage of the recent global increase in the demand for gas — a global positive shock situation seized by Qatar and United States (See punching .com/Nigeria-cant-meet.g). A programme of export diversification can be started from the agricultural sector where several subsectors, ranging from marine to livestock, offer numerous potentials for agro-industrialization and exports.
7. Engage in a hands-on fight against corruption and terrorism from their root causes, which are partially economic but involve the human agent (Umo, 2023b).
8. Undertake a fundamental reform of key macroeconomic institutions including the Central Banks, Ministries of Finance and National Planning to ensure that only the patriotic best and the brightest (BAB) are given such sensitive responsibilities. Engagement of the BABs in the economy and their retention requires that they be adequately incentivized.
9. Set up a National Economic Patriotism Institute (NEPI) with an agenda to incentivize the use of local raw materials and local talents for local production, especially for trade within the African region. This would not only strengthen the local economies but also the regional ones.
10. Set up a Shock Detection Network (SHODEN). Each African country needs to set up a competent multidisciplinary Shock Detection Network (SHODEN) with the mandate for undertaking global and domestic 24/7 scanning to generate early warning signals of shock threats to both the country and its subregions. Such early warning threat signals from SHODEN can facilitate a pre-coactive response to incoming shocks, hence contribute substantially to enhance the country's resilience for shock absorption and transformative recovery.

## 3. Conclusion

An attempt has been made to show that virtually all the vulnerabilities that African economies face are human-capital related given its cross-cutting interface with all policies. The solution in terms of building resilience therefore derives from the rational management and deployment of human capital in such a way that dysfunctionalities in both development and deployment can be avoided.

Areas and elements of vulnerabilities in African economies, using selected cases in Nigeria have been highlighted. This is likely to resonate with the experience of most African countries, especially those with monocultural economies.

Finally, efforts have been made to highlight specifically some of the human-capital driven measures that need to be undertaken to build the strength of African economies with a view to equipping them to absorb shocks without collapsing and to rebound sustainably from any shocks whether external or internal, positive or negative. Refusal to come to terms with the human capital components of crises and solutions may condemn every system to helplessness whenever shock crises strike!

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