

Fagbemi, Fisayo

Article

COVID-19 and sustainable development goals (SDGs): An appraisal of the emanating effects in Nigeria

Research in Globalization

Provided in Cooperation with:

Elsevier

Suggested Citation: Fagbemi, Fisayo (2021) : COVID-19 and sustainable development goals (SDGs): An appraisal of the emanating effects in Nigeria, Research in Globalization, ISSN 2590-051X, Elsevier, Amsterdam, Vol. 3, pp. 1-9,
<https://doi.org/10.1016/j.resglo.2021.100047>

This Version is available at:

<https://hdl.handle.net/10419/330974>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc-nd/4.0/>



COVID-19 and sustainable development goals (SDGs): An appraisal of the emanating effects in Nigeria

Fisayo Fagbemi¹

Department of Economics, Obafemi Awolowo University, Nigeria



ARTICLE INFO

Keywords:

COVID-19
Economic crisis
Sustainable development goals (SDGs)
Nigeria

ABSTRACT

The paper appraised the emanating effect of COVID-19 on sustainable development goals (SDGs) in Nigeria through the systematic illustration of the prevailing incidents. It was affirmed that the preoccupation with the COVID-19 cases caused many other critical socioeconomic issues (like education, infrastructure development, and employment) to suffer a state of negligence or be overlooked. Like other developing countries, Nigeria could become poorer, given the increased unemployment rate and the anticipated difficulty in servicing debt resulting from the COVID-19 outbreak. Hence, festering challenges including poverty, limited access to health care, low education quality, poor road networks among others, could be further entrenched. These incidents could be detrimental to sustainable development goals (SDGs) 2030 agenda. The current crisis, therefore, poses a threat to Nigeria's development prospects, as it may take more time to recover, especially in the post-COVID-19 era. Thus, it is critical to recognize the significance of securing strong institutional regulatory setup and resources (including financial and material resources) needed to facilitate sustainable change in the economy.

1. Introduction

The emergence of the coronavirus pandemic with its searing impact on the global economy seems to have drastically slackened economic activities in the world. COVID-19, which was first discovered in December 2019 in Wuhan city (China), is recently a global challenge to health. It has reshaped our focus and altered the existing status quo in the world economy — showing us a new world with the unprecedented macroeconomic challenges. Given that the COVID-19 has rapidly encircled the globe and consequently affected almost all economies, it has been regarded as a pandemic which has engendered a shift of focus by the World Health Organization (World Health Organization, 2020). Also, according to Gorbalenya et al. (2020), International Committee on Taxonomy of Viruses (ICTV) named it a severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The policy measures and interventions adopted by governments could result in unavoidable economic downturn across the globe (see Fig. 1). While the measures of lockdown and social distance introduced by countries to curb the spread of the COVID-19 virus seemed to be necessary, the short-run downside effect is inevitable (McKibbin & Fernando, 2020). The COVID-19 virus has not only threatened the Sustainable Development Goals (SDGs) but has also

worsen the agreed SDGs (World Bank, 2020). It is a great concern that the current health issue has invariably imposed psychological, social and economic spectrum worldwide.

In sub-Saharan Africa (SSA), many countries in the region have been confronted with enormous social and political challenges (including political instability and conflicts, corruption, bad leadership and food shortages). This development has made SSA mostly vulnerable to the effects of the COVID-19 pandemic. In addition, based on the Africa Center for Strategic Studies (2020) report, due to poor health systems; prevailing armed conflicts (such as mass killings); large displacement of the population in refugee camps; and governance deficiencies, Nigeria, South Sudan, Sudan and the Democratic Republic of the Congo are highly exposed to vulnerability. According to The New Humanitarian (2020) report, the pandemic has added to the risks associated with the delivery of humanitarian assistance in these conflict ridden and fragile economies. Given the pervasive fragile health system and poor economies in SSA, the region has been greatly hit by the global pandemic (World Bank, 2020).

The suspension of economic activities (lockdowns) brought about by the pandemic in both developed and developing countries has led to dysfunctional economic outcomes. Although the prevailing global economic performance has been predicted to cause a large contraction

¹ <https://orcid.org/0000-0002-5742-1514>.

E-mail address: fishay4real@yahoo.com

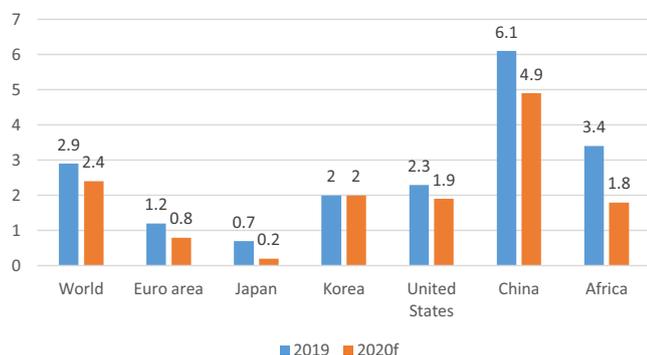


Fig. 1. Global economic growth in 2019 and 2020f. Source: OECD, 2020 and United Nations Economic Commission for Africa (ECA), April 2020.

in GDP across the world², the level of the contraction in Africa will be the largest (OECD, 2020). This has raised more uncertainty in SSA countries (including Nigeria) even with the current low rates of confirmed cases in the region compared to other regions (See Table 1). In light of these incidents, the pandemic could cause a largest drop in African GDP (in 50 years) of about -2% in 2020, and force more than 20.4 million people into extreme poverty (The Sustainable Development Goals Center for Africa (SDGCA), 2020). Due to the increasing concern, varying forecasts of COVID-19 effects on GDP growth in Africa (See Table 2) have been given by respective international institutions. Africa's vulnerability to the fall in commodity prices is expected to be pronounced³. The most critical channel of this shock is through contraction in oil prices, as oil exports account for 40% of Africa's exports (UNECA, April 2020)³. This indicates that countries in the continent would be further constrained by monetary arrangements that would preclude them from the effective implementation of strategic policies. With limited fiscal space and capacity, if the pandemic continues to serve as a haul on high-income countries, there will be availability of fewer funds for investment in Africa. In light of these incidents, a depression threatens, while perceived lower growth prospects will discourage foreign investors, and it can result in inability to generate funds for investment in Africa. Going by the assessment, where improvements are far below or off track the 2030 targets, the backdrop portends a colossal failing for Sustainable Development Goals for SSA (SDGCA, 2020).

In the face of prevailing economic issues in Africa, the report shows that out of 17 SDGs⁴, in Ugandan, potentially, no poverty (SDG1); reduction of hunger (SDG2); decent work and economic growth (SDG8); industry and infrastructure (SDG9); and inequalities (SDG10) would be the most adversely affected (UNDP-Uganda, April 2020). The similar impact has also been projected for Nigeria (Soto et al., 2020). In addition, with the growing trend of the COVID-19 pandemic (see Fig. 2), and as schools remained closed in some African countries, the socioeconomic problems can be exacerbated in Africa. As SSA still suffers from festering problems of high illiteracy rate and other critical issues (with highest levels of education exclusion), the number of out of school students can further increase. For example, about 300 million

students in Africa (previously enrolled) are out of school owing to measures to abate the spread of the pandemic, of which only 10 million are in higher education (United Nations Educational, Scientific and Cultural Organisation ((UNESCO), 2020)⁵. The immediate effect of this incident is poor learning outcomes, which will be exacerbated by the limited internet connection and inadequate access to digital devices, suggesting that education gaps between the poor and the rich will widen (Petrie et al., 2020). This stands in sharp contrast to the better performing regions (like Europe, Americas and Asia). The case of African countries, like Nigeria, have been aggravated by feeble governance structures. In particular, in spite of being one of the continent's economic giants (Kiangoi, 2020), Nigeria's fundamental challenges (such as high poverty rate, poor educational qualities among others) are quite alarming which are persistently aggravated by poor leadership and weak governance systems. Due to this, given the COVID-19 outbreak, existing fragile progress made in alleviating poverty and malnutrition and other key SDGs — no poverty (SDG1); reduction of hunger (SDG2); Quality Education (SDG4); decent work and economic growth (SDG8), previously can be reversed, and further hinders positive outcomes. Hence, the 2030 Agenda may be difficult to reach, especially, the attainment of SDGs in Nigeria, and Africa as a whole. Following socio-economic assessments, most African countries have started dealing with adverse effects of COVID-19 crisis (United Nations Development Programme ((UNDP), 2020). As a consequence, this scenario can potentially derail the continent's SDGs 2030 agenda.

Nigeria, which is one of the SSA countries, confirmed a total of 46,577 cases as of 10 August 2020. The result shows the intensiveness of the spread of the coronavirus in the country (See Fig. 3). The enormous social and economic effects associated with the health crisis seem to have exacerbated existing inequalities and creating new ones, with more severe impacts on the most vulnerable (UNDP, 2020). A country (Nigeria) overwhelmed by the informal sector, the pandemic has caused a huge drop in the quality of livelihood and consumption levels. The attendant impact is becoming an unease conundrum to the economy and peoples' wellbeing. This development could be tied to persisting fragile economic performance over the years. In view of this, there has been concern that the contraction of oil prices because of the pandemic, for a country that depends so much on revenues from oil and gas (World Bank, 2020), will experience significant challenges.

In recognition of this, Nigeria's development priorities and objectives have motivated most of its policy measures. For example, prior to COVID-19, Nigeria's quest for better performance in key SDGs, based on 2020 Voluntary National Review (VNR) on Sustainable Development Goals (SDGs), necessitates a focus on the critical issues of poverty (SDG-1); an inclusive economy (SDG-8); health and wellbeing (SDG-3); education (SDG-4); gender equality (SDG-5); the enabling environment of peace and security (SDG-16); and partnerships (SDG-17). Nigeria's 2017 VNR identified the institutional dimensions for offering an enabling policy environment for the implementation of the SDGs in the country through its Economic and Recovery Growth Plan (ERGP) (2017–2020). Economic, social and environmental dimensions of development that form the key focus makes ERGP in line with the ideals of the SDGs. However, not only that the focus needs to be outlined, it requires effective measures and strong participation to attain. Hence, due to structural defects (like governance deficiencies), despite VNR, Soto et al. (2020) show that the country's indicators of human and physical capital are still low, and even worse than countries with lower GDP per capita. This problem has only aggravated during the pandemic, as it has halted the progress on almost all the SDGs (World Bank, 2020). Following the recent rankings, based on an aggregate score out of 100 in terms of progress on all 17 SDGs, Nigeria falls in bottom 10 countries (see Table 3). Given this development, the objective of this paper is to broaden the

² According to World Bank (2020), the global economy will shrink by 5.2% in 2020, while IMF (2020) predicted 4.9%.

³ As compared to GDP, low-income countries depend more strongly on natural resource rents than other income sources (Steel and Phillips, 2020), and such dependence has risen over recent years (United Nations Conference on Trade and Development (UNCTAD, 2020). ³ In this case, the commodity-and tourist-dependent nations are envisaged to be most vulnerable.

⁴ SDG1 – No Poverty; SDG2 – Zero Hunger; SDG3 – Good Health and Well-Being; SDG4 – Quality Education; SDG5 – Gender Equality; SDG6 – Clean Water and Sanitation; SDG7 – Affordable and Clean Energy; SDG8 – Decent Work and Economic Growth; SDG9 – Industry, Innovation and Infrastructure; SDG10 – Reduced Inequalities; SDG11 – Sustainable Cities and Communities; SDG12 – Responsible Consumption and Production; SDG13 – Climate Action; SDG14 – Life Below Water; SDG15 – Life on Land; SDG16 – Peace, Justice and Strong Institutions; and SDG17 – Partnerships for the Goals.

⁵ Estimates also show that 1.25m students will be affected across the world.

Table 1
COVID-19 pandemic by region as of August 10, 2020.

Region	Total cases	Total deaths	Cases per million	Deaths per million	Population
Central Asia inc Russia	1,100,679	17,130	4,595	72	239,531,973
European Union inc UK	1,677,699	181,441	3,269	353	513,213,363
Middle East	1,143,188	26,971	3,866	91	295,732,825
North Africa	117,651	5,082	770	33	152,696,504
North America	4,405,014	156,921	12,092	431	364,296,266
South America	3,774,741	135,379	8,921	320	423,117,093
South Asia	2,045,999	43,599	1,128	24	1,814,388,744
Sub-Saharan Africa	708,663	11,856	655	11	1,081,142,280

Source: Max, et al. (2020) – Coronavirus Pandemic (COVID-19) as of 10 August 2020.

Table 2
COVID-19 effects on GDP growth in Africa.

Institutions with dates	African GDP growth prospect
African Development Bank, 3 April 2020 (Adesina, 2020)	Projected GDP growth contraction of between 0.7 and 2.8 percentage points in 2020
African Union Commission, 6 April 2020 (AUC, 2020)	Forecasts show a negative growth from 3.4% to between -0.8% and -1.1%
IMF Regional Economic Outlook: Sub-Saharan Africa, 15 April 2020 (IMF, 2020)	Growth in sub-Saharan Africa in 2020 is projected at -1.6%, the lowest level on record, a downward revision of 5.2 percentage points compared to six months ago
Oxford Economics, 26 March 2020 (Oxford Economics, 2020)	The coronavirus-related knock to economic growth in Africa's three largest economies alone could affect the continent's GDP growth from 3.8% to 2.8%
Brookings Institute, 18 March 2020 (Coulibly and Madden, 2020)	Africa's GDP growth is expected to fall from 3.5% in 2019 to between 2.5% and 1.5% in 2020
McKinsey, 6 April 2020 (McKinsey, 2020)	Africa's GDP growth will decrease by three to eight percentage points, from 3.9% in 2019 to between 0.4% and -3.9% in the worst-case scenario
World Bank, 9 April 2020 (World Bank, 2020)	GDP growth in Sub-Saharan Africa could fall sharply from 2.4% in 2019 to between -2.1% and -5.1% in 2020
UNECA, April 2020 (ECA, 2020)	Africa's GDP growth prospects are likely to drop from 3.2% in 2019 to between 1.8% and -2.6% in 2020 depending on policy response

Source: OECD compilation (OECD, 2020).

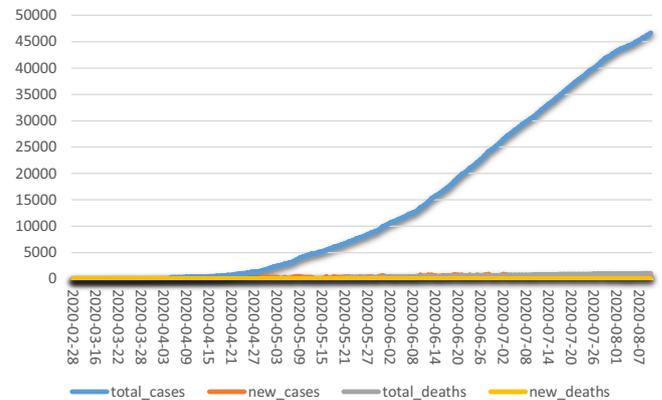


Fig. 3. COVID-19 cases in Nigeria (28 February–10 August 2020). Source: Max, et al. (2020) – Coronavirus Pandemic (COVID-19).

Table 3
Rankings of the top 10 and bottom 10 countries on SDGs performance.

Top 10 countries	Bottom 10 countries
1. Sweden (84.72)	157. Niger (50.15)
2. Denmark (84.56)	158. Democratic Republic of Congo (49.71)
3. Finland (83.77)	159. Sudan (49.56)
4. France (81.13)	160. Nigeria (49.28)
5. Germany (80.77)	161. Madagascar (49.14)
6. Norway (80.76)	162. Liberia (47.12)
7. Austria (80.70)	163. Somalia (46.21)
8. Czech Republic (80.58)	164. Chad (43.75)
9. Netherlands (80.37)	165. South Sudan (43.66)
10. Estonia (80.06)	166. Central African Republic (38.54)

Source: Sustainable Development Report 2020 (Sachs et al., 2020).

1.1. Pre-COVID-19 Nigerian economic condition and progress on selected SDGs

Over the years, Nigeria has been regarded as one of the most corrupt countries of the world with entrenched mismanagement of public funds. The pervasive government deficiencies have continued to undermine the country's development drive (Fagbemi and Adeoye, 2020). Weak institutions have been responsible for most Nigeria's economic crises (Ozili, 2020). Thus, due to poor governance quality, enhancing human capital development has been a great challenge in Nigeria. These are reflected on the level of progress on some selected SDGs as given;

SDG1 (no Poverty): in spite of the emphasis on the poverty reduction based on SDG1, the poverty incidence has remained high. The poor economic management and performance have accounted for the high poverty rate of 40.1% in the country, which represents 82.9 million people (The National Bureau of Statistics (NBS), 2019; World Bank, 2017). This has positioned Nigeria as the leading poverty nation

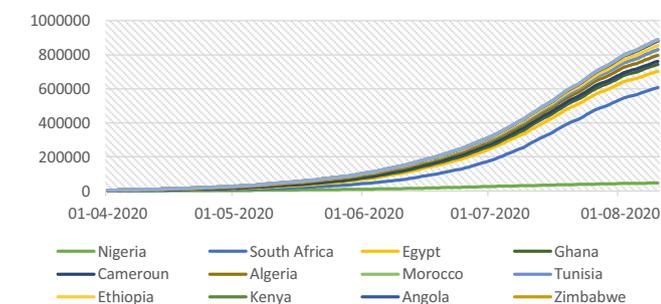


Fig. 2. Total confirmed COVID-19 cases in African countries as of 10 August. Source: Max, et al. (2020) – Coronavirus Pandemic (COVID-19).

understanding of the perceived impact of the COVID-19 outbreak, and offers a critical reflection that would enhance the level of public awareness on potential alternative paradigms of realistic solutions.

in the world (World Bank, 2019). This implies that no meaningful progress seems to have been attained on SDG1.

SDG3 (good health and well-being): In terms of health, although the country had some improvements, as mortality rates of children under five years old contracted by 60% between 1990 and 2018, and a decline of 24% in maternal mortality from 1990 to 2018. However, globally, infant mortality is still the third highest—far higher than countries with lower income per capita. On life expectancy, with just 49 years, Nigeria is placed among the bottom six countries in the world. Overall, the country’s healthcare system is ranked 187 among 190 countries featured (Soto et al., 2020).

SDG4 (quality education): Compared to 25% in the advanced economies and 36% in emerging economies, more than half of the population is of school-age (Soto et al., 2020). The quality of the education system offered is poor (it ranks low in terms of quality measures) as only 20% of the pupils that complete primary school can read a three-sentence passage correctly or fluently (Sachs et al., 2020), while insufficient funds, inadequate infrastructure and lack of materials by teachers significantly contribute to this. As a result, in the index employed to measure education performance, Nigeria’s score falls far below.

SDG6 (clean water and sanitation): regarding water and sanitation, a number of challenges often prevailed. For example, 47 million people still engage in open defecation, limited access to basic water services by a third of the population, and low investments in water and sanitation assets (World Bank, 2017). Thus, progress on SDG6 is also far below the anticipated target of the SDGs.

SDG9 (Industry, Innovation and Infrastructure): on the state of physical capital, Nigeria’s road density is still low compared to other countries as conditions of many roads seem deficient. There is absence of reliable assessment of the road network quality (World Bank, 2019). Lack of investment on physical capital (such as roads, and transport) and social capital (like education and health) has posed a threat to the attainment of SDG9 (Ajia, 2020).

SDG8 (decent work and economic growth): While Nigerian economy is regarded as the largest in Africa (by GDP) at \$519 billion, it is anticipated to drop by 2.3% in Q1, and 1.8% in Q2 of 2020 (Infrastructure Consortium for Africa (ICA), 2020). In addition, there has been a case of slow growth (See Fig. 4), as the population growth rate outstripping the economic growth (Proshare, 2020). Since a significant share of the GDP is required to improve progress across SDGs, the country’s case is far from being overemphasized.

1.2. Pre-COVID-19: How Nigeria’s fiscal position worsened progress on SDGs

Given the strained fiscal space, even prior to Covid-19, financing most of the essential projects is somewhat difficult. The mounting debt stock with no commensurate increase in factor productivity growth is a major cause of concern. Public borrowings have not impacted significantly on economic value as a noticeable deterioration in performance persists over time. The Nigeria’s debt service has continued to undermine its fiscal strength⁶. For instance, recent debt service figures show that the country’s debt service obligation in Q1 2020 took about 99.2% of the quarter’s fiscal revenue (Proshare, 2020). The COVID-19 pandemic could exacerbate this trend (World Bank, 2020). Nigeria’s debt has been trended upwards since 2015 (See Fig. 5). Plausible arguments for the rise in debts including lower oil prices, and disproportionate financial resource allocation. Over the years, the country’s inability to leverage its huge resource endowments for accelerated development has led to poor socioeconomic condition, and in turn makes its fiscal

⁶ Nigeria’s external debt rose from \$10.72bn in December 2015 to \$27.68bn in December 2019, a growth rate of about +158.21% (Proshare, 2020).

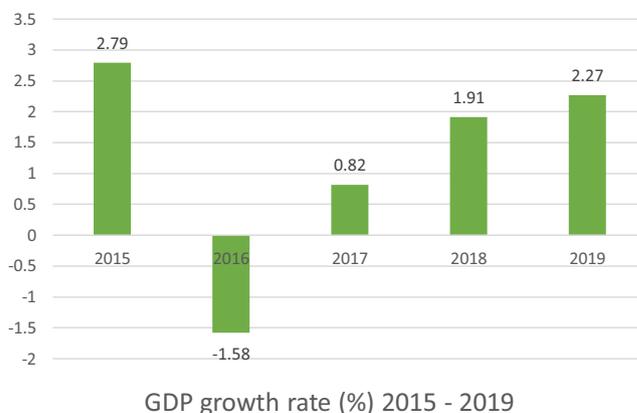


Fig. 4. GDP growth rate (%) between 2015 and 2019. Source: Proshare (2020).

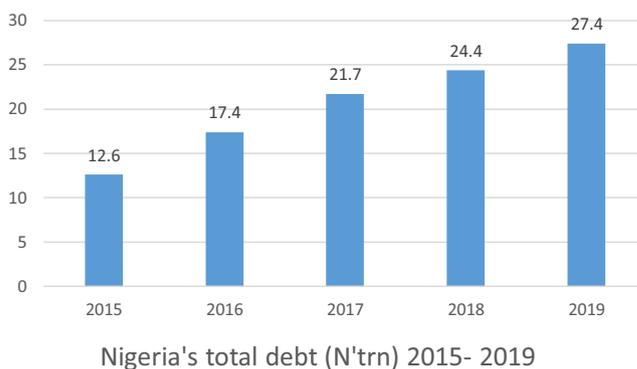


Fig. 5. Nigeria’s total debt (N’tbn) 2015–2019. Source: Proshare (2020).

position susceptible to external shocks. Thus, the needed progress on SDGs seemed to be hampered.

1.3. Nigerian economy during COVID-19

There are two key scenarios linked to COVID-19. The two scenarios are; economic output if the spread of the virus continues and economic output when the virus can be curtailed. If the pandemic keeps spreading with persistent economic disruptions, Nigerian economy would likely witness a critical recession (World Bank, 2020). The gradual rise and spread of the disease in Nigeria has further dampened the growth and developmental outlook of the country. Reflecting on the earliest impacts (such as slackened economic activities) of the virus, Proshare (2020) reported that in Q1 2020 a drop of –0.23% points was recorded for growth rate compared to Q1 2019, and –0.68% points compared to Q4 2019, due to the disruptions in economic activities. Also, as the health crisis demands huge financing to cushion the adverse health, economic and social consequences, SDGs financing gap has widened (OECD, 2020). Given the limited resources and fiscal space, the pandemic has pushed Nigeria into severe financial difficulties. The contraction of international trade, travel and domestic consumption, resulting from intervention measures adopted. These measures, which include lockdowns and suspension of economic activities, have suppressed tax revenues from consumption taxes on which most low- and middle-income countries rely including Nigeria (Kapoor and Buiter, 2020; IMF, 2020). The decline in public revenues has caused unemployment, theft and others socio-economic issues to escalate. For now, the fragile progress on SDGs seems to have been disrupted by prevailing economic realities (See Table 4). Overall, the current fiscal condition may discourage private investors who need

Table 4
COVID-19: Nigerian economic realities as of April 2020.

Economic Indicator	Present	Projection
Inflation (%)	12.34	14.7
Growth rate (%)	2.27	-3.32
Exchange rate reserves(\$'bn)	34.58	27
Unemployment	23.1	43.8
Brent crude(\$/barrel)	31.46	25
Interest rate (%)	12.5	13
Exchange rate (Naira to dollar)	361	458
Total Public debt (N'trn)	25.7	30
Cash Reserve Ratio	27.5	30

Source: NBS, Proshare (2020).

to key into a viable fiscal level for better business performance and effective partnerships with the state (SDG-17).

The present crisis and inadequate financing for sustainable development are aggravating the low human capital development level. As the World Bank (2018) reported that Nigeria is one of the lowest ranked countries in the human development index, out of 157 countries ranked, following results achieved on health and education, Nigeria placed 152 in the ranking. Both the general health crisis and the socioeconomic shock have room for severe developmental challenges. The closure of schools has denied many the opportunity to learn, especially the poor. The gap between the rich and poor keeps widening. In the face of deteriorating socio-economic conditions, current economic realities have given rise to social unrest (UNDP, 2020). To put this into context, Nigeria stands out as likely to add 8 million to the poverty rolls in 2020, while India may be 10 million (Kharas and Hamel, 2020). According to Mahler et al. (2020), even employing the less-demanding World Bank threshold of counting countries that are off-track to attain the SDG goal of eradicating poverty, the COVID-19 impact could escalate poverty in Nigeria. Thus, Nigeria would be among countries that might have the largest rise in poverty rates at least 3% points in 2020. In view of several SDGs issues (including high poverty rate; poor health and well-being; weak quality education; inequality; and poor economic growth), how to curtail the devastating effects of the COVID-19 pandemic remains critical to Nigeria's sustainable development 2030 agenda.

2. Literature review

2.1. Theoretical review

With the SDGs, public health, trade, employment, and environmental development are critical to the 2030 agenda. Essentially, human health is integral to all human activities and indispensable for sustainable development (Singh, 2020). Hence, an impairment of health due to a pandemic outbreak like COVID-19 will trigger economic, social and political crises in any economy (Chakraborty & Maity, 2020). Aside being a threat to health systems, COVID-19 could cause increased unemployment, inequality, poverty and defacement of humanity (World Bank, 2020). Based on disaster risk modelling framework, in fragile and vulnerable economies with weak primary health-care, disease-producing agents, economic growth and sustainable development goals are strongly interconnected (United Nations Disaster Risk Reduction Office (UNDRR, 2017)). Apart from having a disastrous effect on global health, through lockdowns and economic disruptions, the pandemic has had an adverse impact on almost all the SDGs, as socioeconomics problems have worsened in most developing countries because of the measures introduced to curb the spread of the virus (UNDP, 2020). Impact here implies the effect a particular occurrence (like COVID-19 outbreak) has on SDGs (Filho et al., 2020). Hence, the link between COVID-19 and SDGs can be consolidated by this approach: COVID-19 → public health threat → policy intervention

(lockdown) → economic disruption → limited financing → stoppage of sustainable development projects. In this context, Nigeria's focus on Sustainable Development Goals (SDGs): no poverty (SDG-1); an inclusive economy (SDG-8); health and wellbeing (SDG-3); education (SDG-4); gender equality (SDG5); the enabling environment of peace and security (SDG-16); and partnerships (SDG-17) among others, can be affected by the COVID-19 pandemic (World Bank, 2020).

Theoretically, a critical reflection on the theory of economic development (system theory), poor performance stands exacerbated when an economy is not functioning properly due to certain socio-political factors (Wallerstein, 1974). System theory, which is a sociopolitical approach developed to elucidate global economic development in a capitalistic economy, stresses that a "reduction of state structures and policies to determination by dominant class interests" (Coccia, 2018, p. 6) would have impact on the citizens' decisions. Since "impact" often exists within a context, from a system theory perspective, the world economy self-adjusts (or organizes) through learning, but suffers structural irreversibility during unprecedented economic strain, and with a propensity for growth to plummet, resulting to the loss of progress and uncertainty in the future (Foster, 1997). The system theory perspective helps broaden the understanding of the perceived influence of a singular factor on economic growth, and the wide economic impact assessment (Wallerstein, 1974). Hence, policies introduced (like lockdown) because of the COVID-19 pandemic would not only affect the economy but also the attainment of SDGs, and thus people's welfare. In view of this, it could be hypothesized that the COVID-19 outbreak could influence policy focus on SDGs.

Given that the large proportion of the global population lack access to proper sanitation and drinking water (SDG 6), the link between clean water and health is also highlighted by the COVID-19 pandemic (Filho et al., 2020). Tackling poor sanitation problem and rebalancing health system could help improve health outcomes, and thus mitigate the severe impact of COVID-19 on SDG3 & 6 (Soto et al., 2020). In addition, based on social welfare theory, different perspectives are given on how social welfare can be developed to meet the basic needs of the society. For example, good social welfare programs could be beneficial in terms of poverty alleviation, and to help cope with challenges associated with unanticipated disasters like COVID-19 (Luenberger, 1996; Abramovitz, 2001). Thus, improved social welfare services have been a key proven way to protect people from economic hardship in time of socioeconomic crisis (Fleurbaey and Maniquet, 2011; Andersen, 2012). This implies that poverty problem will be better addressed in the period of health crisis, and in turn mitigates the impact of COVID-19 on SDG1 (no poverty). However, such social welfare programs are absent in Nigeria, which has made the coronavirus pandemic in the country caused severe socioeconomic hardship to the people, especially to most vulnerable individuals (Ozili, 2020). Consequently, COVID-19 outbreak seems to have stalled progress on SDGs in Nigeria. Indeed, social welfare theory offers a link between socioeconomic development and health.

2.2. Empirical review

Based on the literature, the interconnection between public policies and economic activities is not a novel concept, as there is an established relationship between government policies and economy performance (Wallerstein, 1974; Skocpol, 1977). In addition, it has been emphasized that economic disruptions (or crises) (Jones, 2016); market failure (Stiglitz, 2008; Petrakos, 2014), civil unrest through protests (Bernburg, 2016; Grasso and Giugni, 2016); external trade and commodity prices shocks (Gomulka and Lane, 1997; Mendis, 2002; Francois and Woertz, 2009), are often induced by various policies interventions embarked upon by governments. Public policies matter to all individuals irrespective of socio-economic status. According to Jutz (2015), in the analysis of the role of income inequality and redistribution in alleviating income-related health inequalities in Europe, there

is adverse association between social policies and health inequalities, suggesting that social policies could cause a reduction in health inequalities in Europe. Also, following [Chinazzi et al. \(2020\)](#), at the beginning of the travel ban from Wuhan on 23 January 2020, while most Chinese cities had already received a number of infected travellers, the travel quarantine of Wuhan slowed down the aggregate epidemic progression by only 3–5 days in mainland China. However, this policy measure had a more severe impact on both domestic and international activities. These imply that the various policy measures introduced by governments across countries because of the COVID-19 outbreak, as necessary safeguards of population health have a significant effect on peoples' well-being, economic activities and sustainable development goals (SDGs) ([Haleem et al., 2020](#)). These authors ([Haleem et al., 2020](#)) argue that economic effects of coronavirus are: the retardation of the manufacturing of essential goods, disruptions of the supply chain of products, poor cash flow in the market, losses in national and international business, drastic reductions in the revenue growth, while the social consequences including the cancellation or suspension of large-scale sports and tournaments, social distancing with peers and family members, closure of hotels, restaurants and religious centers.

Similarly, [Holt-Lunstad et al. \(2010\)](#) explore the extent to which social relationships influence mortality risk. The research outcome indicated that there is a 50% rising possibility of survival for participants with more potent social relationships. Across ages; sexes; initial health status; causes of deaths; and follow-up period, the finding is consistent. Using a simple model, [Fornaro and Wolf \(2020\)](#) stress that the coronavirus causes an adverse supply shock, suggesting that sound policy interventions (such monetary and fiscal policy) could be needed to prevent this adverse supply shock from severely impairing employment and productivity. In addition, [Ramelli and Wagner \(2020\)](#) affirm that, through the amplification by financial channels, the current health crisis transformed into an economic crisis. [Zhang et al. \(2020\)](#) show that COVID-19 has impacted financial markets across the world. It has caused investors to suffer significantly due to an unprecedented level of risks involved. Based on [Ozili and Arun \(2020\)](#), overall, lockdowns, restrictions of monetary policy decisions and international travel have greatly affected the level of world economic activities. The present pandemic has not only disrupted the economy, but seems to have increased the likelihood of social unrest, thereby threatens the global peace and justice goal (SDG-16). Also, [Ozili and Arun \(2020\)](#) indicate that given the school closure policy, the COVID-19 outbreak could be detrimental to the quality of education (SDG-4). In general, the rate of inequalities tends to rise due to the impoverishment of countries, which will harm SDG-1 and -10 (no poverty and reduced inequalities) ([Filho et al., 2020](#)). Hence, a critical awareness is necessary to secure viable practices and resources needed to facilitate sustainable change across the globe.

Regarding studies on Nigeria, [Oruonye and Ahmed \(2020\)](#) show that the outbreak, coupled with the spread of the disease, in Nigeria, has led to shutdowns of economic activities in most cities and states in the country. They argue that the tourism industry has been severely affected by the COVID-19 pandemic. In the work of [Ozili \(2020\)](#), while analyzing the COVID-19 spillover-effects on Nigeria, posits that the existing structural weaknesses have contributed to the severity of the crisis in the country. Given the large poor population in Nigeria, house orders and other restrictions employed in some high-income countries cannot be practical or may not yield better outcomes ([World Health Organization, 2020](#)). Therefore, based on the work of [Buheji et al. \(2020\)](#), the COVID-19 pandemic would cause a huge setback to all poverty alleviation efforts of the Nigerian government. The preoccupation with the effect of COVID-19 on growth and health services implies that many other critical issues like infrastructural deficiencies, prevailing armed conflicts (such as present terrorist attacks (Boka Haram) on communities), poor education quality, inequalities, fragile fiscal space, and weak institutions may suffer a state of neglect or likely to be over-

looked ([Filho et al., 2020](#)). Like other developing countries, Nigeria may become poorer, since the increased unemployment rates and the anticipated difficulties in servicing debt obligations imply that chronic challenges such as inadequate food supplies, limited access to health care, poor road networks among others, will exacerbate ([Filho et al., 2020](#)). Overall, these empirical evidences are detrimental to sustainable development goals (SDGs) 2030 agenda in African most populous country. The current crisis therefore poses a threat to Nigeria's development prospects, as it may take more time to recover, especially in the post-COVID-19 era.

Furthermore, in both developed and developing countries, it has been reported that current global crisis could stall accelerated progress on SDGs ([IMF, 2020](#)), but Sub-Saharan Africa (including Nigeria) viewed to be more affected by the COVID-19 impact on SDGs as a result of the unprecedented economic crisis experienced in the region ([Gilbert et al. 2020](#)). According to Global Report on Food Crises ([WFP, 2020](#)), food poverty is likely to rise or even double in Africa, indicating that the COVID-19 pandemic has worsened limited food supplies (SDG2) in most countries in the region ([Filho et al., 2020](#)). [Fagbemi and Asongu \(2020\)](#) in their review, which detailed the likely impact of the COVID-19 outbreak on the socioeconomic condition in Africa affirm that the pandemic would further exacerbate Africa's socioeconomic problems. This development is envisaged to further retard progress on SDGs which has been off track the 2030 targets before COVID-19 incidence ([World Bank, 2020](#)). Overall, following [The Sustainable Development Goals Center for Africa \[SDGCA\] \(2020\)](#), growth, inclusion and environmental sustainability which deductively formed the three core elements of the SDGs will be undermined by the COVID-19 Pandemic in Africa.

It is against this background, that this study details the possible impact of COVID-19 on SDGs in Nigeria. To the extent of the above review, exclusive study on SDGs and COVID-19 in Nigeria is limited. Hence, this study centers on the likely impact of COVID-19 on SDGs in Nigeria, with attention given to SDG1 (no Poverty), SDG3 (good health and well-being), SDG4 (quality education), SDG6 (clean water and sanitation), SDG9 (Industry, Innovation and Infrastructure), and SDG8 (decent work and economic growth). The methodological approach adopted for the work utilizes conceptual analysis which is based on plausible assumptions and reported scenarios.

3. Channels of potential economic impact of COVID-19: Conceptual analysis

This study adopts the conceptual analytical approach of [Evans and Over \(2020\)](#) to shed more lights on the possible impact of COVID-19 on the economy. This is to further broaden the understanding of the pervasive influence of the COVID-19 outbreak. In a weak economic setting, lockdown and economic disruptions resulting from a pandemic will have a noticeable impact on the economy, as it is expected to place unprecedented pressure on the fragile healthcare system (United Nations Disaster Risk Reduction Office ([UNDRR, 2017](#))). The assertion is better elucidated by the conceptual framework (see [Fig. 6](#)). This section therefore demonstrates, in a context of Nigeria, the potential channels of the COVID-19 impact on the country's sustainable development goals (SDGs). Thus, the study could validate the assessed scenarios of international organizations such as IMF, World Bank, and African union (AU). The analysis itself is intended to further illustrate complex intersectoral connections which are fundamental elements of critical development.

Given the prevailing global development, the outbreak has affected the level of economic development as well as economic decisions ([World Bank, 2020](#)). [Fig. 6](#) illustrates or shows the channel through which the current policy changes affect SDGs in Nigeria. COVID-19 impact can be viewed from two distinct channels: First, the direct cost from health crisis (sickness and mortality) caused by the disease. This

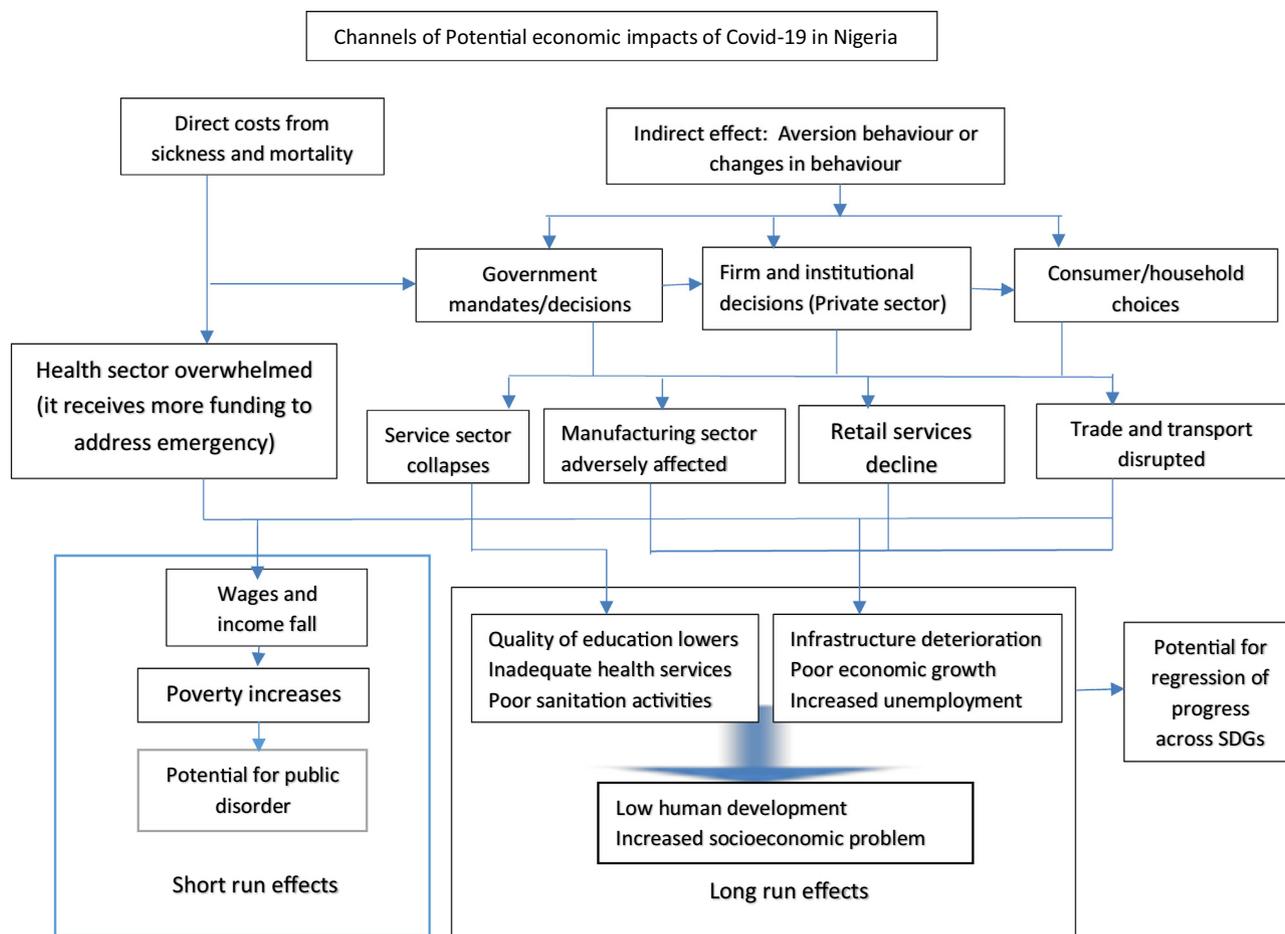


Fig. 6. Broad channels of the economic impact of COVID-19. Source: Author’s adaptation from Evans and Over (2020).

can involve the cost an income earner bears when he/she falls ill, causing the shrinking of the active population/dependents ratio. In this illustration, this can be compounded by reduced wages or loss of income, thereby accentuates poverty levels – by illustration it is termed short-term effects. According to Diwakar and Shepherd (2018a), ill-health and low resilience capacities can spur poor economic performance. The authors’ study was centered on eleven (11) Sub-Saharan African countries, and South and Southeast Asia. In the analysis, it was found that when there was no health insurance or other forms of universal health coverage, reactions to health shocks by the poor often accompanied by distress sales of assets, and taking out loans from informal moneylenders, most times at excessive rates of interest. Hence, COVID-19 could reinforce existing problems and serve as another source of impoverishment, and in turn inhibits the capacity of vulnerable households to get extricated from poverty (Diwakar and Shepherd, 2018b).

Second effect, which can be termed indirect effect, is behavioral aversion (people tend to behave in an unusual way). This occurs as a result of the fear of contacting the virus, resulting to fear of associating with people and a decrease in labour force participation in the economy (UNDP, 2020) — closure of schools and businesses, transportation disruptions. This has caused governments to shut the border (placement of restrictions on both internal and international movement) and private business owners to disrupt trade and economic activities. As shown in Fig. 6, this behavioral aversion occurs in three ways;

- a) Ban imposition on many activities by governments through lockdowns or suspension of activities. It is mostly motivated by the concern to curb the spread of the disease.

- b) Decisions by firms and institutions. This comes with closures of businesses and schools.
- c) Households’ or individuals’ choices including the reduction of visits to the market and avoidance of social gatherings or activities.

Based on UNDP (2020) reported scenarios, these actions have a significant influence on the key sectors that contribute to GDP of a country (such as agriculture, the health sector, education, manufacturing, trade and transportation). These can engender decreased income from both the supply side (low production induces price hikes) and the demand side (a reduction in demand from consumers adversely affects business owners and their workers). In view of this, long term growth prospect can be threatened as well as the progress across SDGs.

As more financial resources are diverted to the health sector, and as social activities reduced, countries tend to invest less in physical infrastructure. Also as schools shutdown, with lost opportunities to learn, vulnerable students may find it difficult to return to school. This can lead to lower long-term learning in the country, and thus triggers increased inequality and reduced human capital development. The socioeconomic implications of these incidences are far beyond human anticipations. For example, considering greater inequalities; unprecedented human rights abuse, informal sector expansion and retardation of progress across SDGs that potentially follow in developing countries including Nigeria, the impact of the pandemic could be unbearable.

4. Concluding remark

The paper appraises the emanating effect of COVID-19 on sustainable development goals (SDGs) in Nigeria through critical analysis of

the prevailing incidents. It reveals the potential channels through which COVID-19 can affect SDGs in the country. Across the globe, governments are using two fundamental approaches (interventions) to response to the COVID-19 pandemic; mitigation and suppression. While these strategies seem necessary to curb the transmission rate, they are accompanied by serious economic and social implications. Unlike developed countries, these measures may not be viable due to certain underlying factors (like government deficiencies) in a country like Nigeria. In the country, the healthcare infrastructure (weak healthcare) poses a severe challenge (UNDP, 2020; World Bank, 2020). Intervention strategies, including lockdowns, disproportionately affect the poor and their livelihoods. This is exacerbated by pervasive institutional deficiencies in the country, abrupt suspension of the means of livelihood, could lead to socio-economic crisis. The paper systematically gives an illustration of the implications of the global response to the pandemic on Nigeria's development prospects. It draws lessons from the prevailing incidents. The central argument is well beyond reducing or mitigating the spread of the disease, but how to implement viable intervention measures (internally and economically suitable measures) in a way that will not further engender entrenched suffering. Sound policy measures for enhancing social wellbeing and progress on SDGs in the country are critical. Adopting pro-poor policy approach seems to be a good way in the face of perceived strained public trust and fiscal space. In the absence of this, sustainable development efforts could be jeopardized.

It was further affirmed that the preoccupation with the COVID-19 spread could cause many other critical issues such as infrastructural deficiencies, prevailing armed conflicts (like present terrorist attacks (Boko Haram) on communities, and other social unrest), poor education quality, inequalities, fragile fiscal space, and weak institutions, to suffer a terrible state of neglect or likely be overlooked. Like other developing countries, Nigeria could become poorer, given the increased unemployment rates and the anticipated difficulties in servicing debt. Hence, the festering challenges including poverty, inadequate food supplies, limited access to health care, poor road networks among others, would be further entrenched. These could be harmful to sustainable development goals (SDGs) 2030 agenda. The current crisis therefore poses threat to Nigeria's development prospects, as it may take more time to recover, especially in the post-COVID-19 era. Thus, it is critical to know the importance of securing strong institutional regulatory setup and resources (including financial and material resources) needed to facilitate sustainable change in the economy. For instance, any strategy should be conflict sensitive approach in such a way that it will incorporate the identification of risk and opportunities as central to ensuring that the existing fragility is not worsened by government strategies.

5. Author's statement

All issues raised by the reviewers have been addressed. Errors noted were critically and systematically effected. In addition, the grammatical errors were corrected accordingly, while the technical issues raised were attended to and properly effected (for example, Fig. 6: Broad channels of the economic impact of COVID-19).

In addition, the theoretical justification of the link between COVID-19 and SDGs has been further established. The empirical review has also been broadened.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

- Abramovitz, M. (2001). Everyone is still on welfare: The role of redistribution in social policy. *Social Work*, 46(4), 297–308.
- Adesina, A. (2020). The pandemic is no time for fiscal distancing. <https://edition.cnn.com/2020/04/03/africa/adesinafiscal-distancing-opinion/index.html>.
- Africa Center for Strategic Studies (2020). Mapping Risk Factors for the Spread of COVID-19 in Africa. <https://africacenter.org/spotlight/mapping-risk-factors-spread-covid-19-africa/>.
- Ajia, T. (2020). Infrastructure's Influence – An Investment Perspective on Nigeria's Economy. *Oxford Urbanists* (May, 19, 2020).
- Andersen, J. G. (2012). *Welfare states and welfare state theory*. Center for Comparative Welfare Studies, Working Paper.
- AUC (2020). *Impact of the coronavirus (COVID 19) on the African economy*. Addis Ababa: African Union Commission.
- Bernburg, J. G. (2016). *Economic crisis and mass protest: The pots and pans revolution in Iceland*. Routledge.
- Buheji, M., Cunha, K. C., Beka, G., Mavrić, B., Souza, Y. L., Silva, S. S., et al. (2020). Impact on global poverty. A global integrative multidisciplinary review. *American Journal of Economics*, 10(4) 213224.
- Chakraborty, I., & Maity, P. (2020). COVID-19 outbreak: Migration, effects on society, global environment and prevention. *Science of the Total Environment*, 728(2020) 138882.
- Chinazzi, M., Davis, J. T., Ajelli, M., Gioannini, C., Litvinova, M., Merler, S., & Viboud, C. (2020). The effect of travel restrictions on the spread of the 2019 novel coronavirus (COVID-19) outbreak. *Science*, 368(6489), 395–400.
- Coccia, M. (2018). World-System Theory: A sociopolitical approach to explain World economic development in a capitalistic economy. *Journal of Economics and Political Economy*, 5(4), 459–465. <https://doi.org/10.1453/jepe.v5i4.1787>.
- Coulibaly, B., & Madden, P. (2020). Strategies for coping with the health and economic effects of the COVID-19 pandemic in Africa. <http://www.brookings.edu/blog/africa-in-focus/2020/03/18/strategies-for-coping-with-the-health-and-economic-effects-of-the-covid-19-pandemic-in-africa/>.
- Diwakar, V., & Shepherd, A., (2018a). Health, resilience and sustainable poverty escapes: Synthesis. Available at <https://dl.orangedox.com/duddnR>.
- Diwakar, V., & Shepherd, A., (2018b). Sustaining escapes from poverty. ODI Working Paper 539, Available at <https://www.odi.org/sites/odi.org.uk/files/resource-documents/12471.pdf>.
- Evans, D., & Over, M., (2020). The economic impact of COVID-19 in low-and middle-income countries. Available at <https://www.cgdev.org/blog/economic-impact-covid-19-low-and-middle-income-countries>.
- Fagbemi, F. & Asongu, S. (2020). Covid-19 and Socioeconomic Crises in Africa: Overview of the Prevailing Incidents. AGDI Working Paper (WP/20/102), <https://ssrn.com/abstract=3755217>.
- Fagbemi, F., & Adeoye, G. O. (2020). Nigerian governance challenge: exploring the role of natural resource rents. *Global Journal of Emerging Market Economies*, 12(3), 335–358. <https://doi.org/10.1177/0974910120919001>.
- Filho, W. L., Brandli, L. L., Salvia, A. L., Rayman-Bacchus, L. & Platje, J. (2020). COVID-19 and the UN Sustainable Development Goals: Threat to Solidarity or an Opportunity? *Sustainability* 2020, 12, 5343; doi:10.3390/su12135343.
- Flourbaey, M., & Maniquet, F. (2011). *A theory of fairness and social welfare*. Cambridge University Press.
- Fornaro, L., & Wolf, M. (2020). Covid-19 coronavirus and macroeconomic policy, Working Paper, available at SSRN: <https://ssrn.com/abstract=3560337>.
- Foster, J. (1997). The analytical foundations of evolutionary economics: From biological analogy to economic selforganization. *Structural Change and Economic Dynamics*, 8, 427–451.
- Francois, J., & Woerz, J. (2009). *The big drop: Trade and the great recession. the great trade collapse: Causes, consequences, and prospects*. VoxEU. Org..
- Gilbert, M., Pullano, G., Pinotti, F., Valdano, E., Poletto, C., Boëlle, P.-Y., et al. (2020). Preparedness and vulnerability of African countries against importations of COVID-19: A modelling study. *Lancet*, 395, 871–877.
- Gomulka, S., & Lane, J. (1997). Recession dynamics following an external price shock in a transition economy. *Structural Change and Economic Dynamics*, 8(2), 177–203.
- Gorbalenya, A. E., Baker, S. C., Baric, R. S., de Groot, R. J., Drosten, C., Gulyaeva, A. A., et al. (2020). Severe acute respiratory syndrome-related coronavirus: The species and its vi-ruses—a statement of the Coronavirus Study Group. *BioRxiv*. <https://doi.org/10.1101/2020.02.07.937862>.
- Grasso, M. T., & Giugni, M. (2016). Protest participation and economic crisis: The conditioning role of political opportunities. *European Journal of Political Research*, 55 (4), 663–680.
- Haleem, A., Javaid, M., & Vaishya, R. (2020). Effects of COVID 19 pandemic in daily life. *Current Medicine Research and Practice*, 10(2), 78–79.
- Holt-Lunstad, J., Smith, T. B., Layton, J. B., & Brayne, C. (2010). Social relationships and mortality risk: A meta-analytic review. *PLoS Med*, 7(7), e1000316.
- IMF (2020). Fiscal monitor (April 2020), International Monetary Fund, Washington D. C., <https://www.imf.org/en/Publications/FM/Issues/2020/04/06/fiscal-monitor-april-2020>.
- IMF (2020). IMF Regional Economic Outlook: Sub-Saharan Africa: COVID-19: An Unprecedented Threat. International Monetary Fund, Washington, DC, <https://www.imf.org/en/Publications/REO/SSA/Issues/2020/04/01/sreo0420>. (accessed on 16 April 2020).

- Infrastructure Consortium for Africa (ICA). (2020). Key Achievements in the financing of African infrastructure in 2018, Financing Trends <<https://www.icafrica.org/en/topics-programmes/key-achievements-in-the-financing-of-african-infrastructure-in-2018/>>, accessed 19 January, 2020.
- Jones, Colin (2016). The credit crunch: Short-term UK housing market correction or long-term tipping point? *International Journal of Housing Policy*, 16(1), 70–90.
- Jutz, R. (2015). The role of income inequality and social policies on income-related health inequalities in Europe. *International Journal for Equity in Health*, 14 (1), 117.
- Kapoor, S., & Buitner, W. (2020). To fight the COVID pandemic, policymakers must move fast and break taboos (blog), VOX CEPR Policy Portal, <https://voxeu.org/article/fight-covidpandemic-policymakers-must-movefast-and-break-taboos>.
- Kharas, K., & Hamel, K. (2020). Turning back the Poverty Clock: How will COVID-19 impact the world's poorest people? Brookings institution.
- Kiangoi, K. (2020). Covid-19 and the implementation of the SDGs in Africa. Policy Center for the New South, May 22, 2020.
- Luenberger, D. G. (1996). Welfare from a benefit viewpoint. *Economic Theory*, 7(3), 445–462.
- Mahler, D. G., Lakner, C., Aguilar, R. C., & Wu, H. (2020). The impact of COVID-19 (Coronavirus) on global poverty: Why Sub-Saharan Africa might be the region hardest hit. World Bank blogs, April 20, 2020, <https://blogs.worldbank.org/opendata/impact-covid-19-coronavirus-global-poverty-why-sub-saharan-africamight-be-region-hardest>.
- Max R., Hannah, R., Esteban, O., & Joe, H. (2020). Coronavirus Pandemic (COVID-19). Published online at OurWorldInData.org. Retrieved from: <https://ourworldindata.org/coronavirus> [Online Resource].
- McKibbin, W., & Fernando, R. (2020). The Global Macroeconomic Impacts of COVID-19: Seven Scenarios. https://www.brookings.edu/wp-content/uploads/2020/03/20200302_COVID-19.pdf.
- McKinsey (2020). Tackling COVID-19 in Africa. <https://www.mckinsey.com/featured-insights/middle-east-and-africa/tackling-covid-19-in-africa>.
- Mendis, C. (2002). External shocks and banking crises in developing countries: Does the exchange rate regime matter?
- OECD. (2020). COVID-19 and Africa: Socio-economic implications and policy responses. <https://www.oecd.org/coronavirus/policy-responses/covid-19-and-africa-socio-economic-implications-and-policy-responses-96e1b282/>.
- Oruonye, E. D., & Ahmed, Y. M. (2020). An appraisal of the potential impacts of Covid-19 on tourism in Nigeria. *Journal of Economics and Technology Research*, 1(1).
- Oxford Economics. (2020). African giants stumble due to Covid-19 pandemic, Oxford Economics. <https://www.oxfordeconomics.com/my-oxford/publications/547853>.
- Ozili, P. (2020). Covid-19 pandemic and economic crisis: The Nigerian experience and structural causes. SSRN Electronic Journal, DOI: 10.2139/ssrn.3567419.
- Ozili, P. K., & Arun, T. (2020). Spillover of COVID-19: impact on the global economy. Available at SSRN 3562570.
- Petrakos, G. (2014). Economic crisis in Greece. *European and domestic market and policy failures. Région et Développement*, 39, 9–33.
- Petrie, C., Katija, A., Pukhraj, R., Romayne, J., Gilliland, D., & Tuominen, S. (2020). Spotlight: Quality education for all during Covid-19 crisis. https://hundredcdn.s3.amazonaws.com/uploads/report/file/15/hundred_spotlight_covid-19_digital.pdf.
- Proshare (2020). Coronanomics and Nigerian economy: Understanding the realities of an impending recession. 1602 - 8842 Vol. 1 No. 204.
- Ramelli, S., & Wagner, A. F. (2020). Feverish stock price reactions to covid-19. CEPR Discussion Paper No. DP14511. Available at SSRN, Available at: <https://ssrn.com/abstract/53560319>.
- Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., Woelm, F. (2020). The sustainable development goals and COVID-19. sustainable development report 2020. Cambridge: Cambridge University Press.
- Singh, P. (2020). *Unsustainability and pandemics: Exploring the relationship and finding the crucial underlying factor*. International Network for Government Science Advice.
- Soto, M., Moszoro, M. & Pico, J. (2020). Nigeria: Additional spending toward Sustainable development goals. IMF Country Report No. 20/177.
- Steel, I. & Phillips, D. (2020). How tax officials in lower-income countries can respond to the coronavirus pandemic. Overseas Development Institute (ODI), London, https://www.odi.org/sites/odi.org.uk/files/resourcedocuments/200304_tax_corona_it_ec_0.pdf.
- Stiglitz, J. E. (2008). Government failure vs. market failure: Principles of regulation.
- The New Humanitarian (2020). Coronavirus and aid: What we're watching, 16-22 April. <https://www.thenewhumanitarian.org/news/2020/04/16/coronavirus-humanitarian-aid-response>.
- The National Bureau of Statistics (NBS). (2019). A report on poverty and inequality from September 2018 to October 2019. <https://www.aljazeera.com/news/2020/05/forty-percent-nigerians-live-poverty-line-report200504141558636.html>.
- The Sustainable Development Goals Center for Africa (SDGCA). (2020). COVID-19 Unprecedented Risk to SDGs in Africa, May 2020.
- UNCTAD. (2020). The Covid-19 shock to developing countries: Towards a “whatever it takes” programme for the two-thirds of the world’s population being left behind. https://unctad.org/en/PublicationsLibrary/gds_tdr2019_covid2_en.pdf?user=1653.
- UNDP. (2020). COVID-19 and the SDGs: How the ‘roadmap for humanity’ could be changed by a pandemic.
- UNDP-Uganda. (April 2020). Socio-economic impact of COVID-19 in Uganda: Short-, medium-, and long-term impacts on poverty dynamic and SDGs using scenario analysis and system dynamics modeling. COVID-19 Policy brief #1.
- UNDRR. (2017). Terminology on disaster risk reduction, UNDRR. <https://www.unisdr.org/we/inform/terminology>.
- United Nations Economic Commission for Africa (ECA), April 2020. Economic Impact of the COVID-19 on Africa. http://www.uneca.org/sites/default/files/uploadeddocuments/stories/eca_analysis_-_covid-19_macroeconomiceffects.pdf.
- United Nations Educational, Scientific and Cultural Organisation (UNESCO). (2020). Socio-economic and cultural impacts of covid-19 on Africa: what responses from UNESCO?
- Wallerstein, I. (1974). The rise and future demise of the world capitalist system: Concepts for comparative analysis. *Comparative Studies in Society and History.*, 16, 387–415.
- WFP. (2020). Global Report on Food Crises (GRFC). Joint Analysis for Better Decisions. https://www.fsinplatform.org/sites/default/files/resources/files/grfc_2020_online_200420.pdf.
- World Bank (2017). *A wake-up call: Nigeria water supply, sanitation, and hygiene poverty diagnostic*. World Bank, Washington, DC: WASH Poverty Diagnostic.
- World Bank (2018). *Human capital development project*. Washington, DC 20433: The World Bank.
- World Bank (2019). *Global economic prospects, June 2019: Heightened tensions, subdued investment*. Washington, D.C.: World Bank. Available at <http://documents.worldbank.org/curated/en/541011559679035492/pdf/Global-Economic-Prospect-2019-Heightened-Tensions-Subdued-Investment.pdf>.
- World Bank. (2020). The impact of COVID-19 (Coronavirus) on global poverty: Why Sub-Saharan Africa might be the region hardest hit. <https://blogs.worldbank.org/opendata/impact-covid-19-coronavirus-global-povertywhy-sub-saharan-africa-might-be-region-hardest>.
- World Health Organization. (2020). Clinical Management of Severe Acute Respiratory Infection When Novel Coronavirus (2019-nCoV) Infection Is Suspected: Interim Guidance.
- Zhang, D., Hu, M., & Ji, Q. (2020). Financial markets under the global pandemic of COVID-19. *Finance Research Letters*, 36, 101528. <https://doi.org/10.1016/j.frl.2020.101528>.