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COVID-19 in Africa: socio-economic impact, policy response and opportunities

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Abstract

This study analyses the COVID-19 situation in Africa and discuss the socioeconomic impact, policy response and opportunities. The COVID-19 (coronavirus) pandemic which has affected the global economy has also affected the African economy through spillovers to African countries. Many African countries have taken bold quarantine and lockdown measures to control the spread of COVID-19 although this has come at a cost such as the collapse of health systems and a painful economic crisis or recession. A coordinated and bold response by African authorities is needed. First, public funds should be provided to improve the capacity of health systems in African countries. Second, financial support should be provided to individuals, entrepreneurs and corporations to help them cope with the adverse effect of the coronavirus crisis. Third, employers should be granted incentives to preserve employment during the crisis to avoid mass layoff of workers. Four, the Central bank in African countries should provide liquidity and credit support as well as asset purchase programs to prevent credit and liquidity crunch in domestic financial markets. Finally, social authorities in African countries should ensure that people in small communities have access to effective communication systems to enhance remote social interaction between community members, family and friends during the crisis.

JEL code: G21, G28, I11, I18

Keywords: Africa, COVID-19, Coronavirus, SARS-CoV-2, outbreak, pandemic, social policy, economic crisis, financial crisis, global recession, public health, spillovers, monetary policy, fiscal policy, liquidity provision, Central banks, socioeconomic impact.

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1. Introduction

This paper examines the socioeconomic impact of COVID-19 and the policy response in African countries. Coronavirus, or the disease it causes 'COVID-19', originated from the Wuhan Province of China in December 2019. It began spreading rapidly in China and to other parts of the world through the movement of people in early 2020. The spread of COVID-19 affected economic activities in China, and in February, the Chinese economy came to a halt. China is a major exporter of commodities to African countries, and the economic contraction in China is expected to have spillover consequences for African countries through the negative impact on African businesses that rely heavily on China for the supply of primary and intermediate raw materials. The coronavirus crisis is affecting many African countries, and the number of confirmed cases have been rising rapidly with a particularly severe situation in South Africa, Egypt, Algeria, Morocco and Cameroon.

Prior to the COVID-19 pandemic, most of the healthcare infrastructure in African countries had deteriorated. Currently, in Africa, 65% of health care expenses are made from out-of-pocket expenditure compared to Europe where the national and regional authorities are responsible for the health policies and expenditure of citizens. During the COVID-19 pandemic, despite the quarantine and other measures adopted to stop the spread of COVID-19 in African countries, the number of infected cases continued to increase significantly. This situation mounted unprecedented pressure on the public health systems in many African countries. Some private hospitals refused to admit infected patients while public hospitals exceeded their capacity. This pressured the government of some countries to build isolation centers in large open fields around the country; notably, football stadiums were converted to isolation centers in countries like Cameroon and Nigeria. In African countries where good health care systems exist, the government had to scale-up intensive care units and provide more resources for hospitals and healthcare systems to control the spread of coronavirus.

The severe social effect of the coronavirus crisis was felt through the imposition of movement restrictions in many African countries. Some restrictive measures that were imposed to control the spread of coronavirus include: restricting non-essential activities, closing schools and universities, encouraging people to stay home, the lockdown of entire cities, requiring essential businesses to run skeletal operations and employees should work from home. These measures inevitably affected economic activities in African countries, and policy makers had to use economic policies, both fiscal and monetary policies, to mitigate the negative effect on the economy. Many African countries deployed the national budget and Central bank's support in developing policies to mitigate the health and economic crises. Generally, the policy response in several African countries are country-specific because African countries are not closely intertwined.

The exact socio-economic impact of COVID-19 and the consequence of each policy response on African countries is still unknown, and the literature have not documented the effects of the coronavirus pandemic on African countries. The emerging coronavirus literature have explored the impact of the coronavirus crisis using single-day data, two-day data or even a week data and they mostly focus on a specific sector such as the tourism industry (Gössling et al, 2020), the mining sector (Laing, 2020), the health care sector (Ather et al, 2020), or the economy (Fernandes, 2020; Ozili and Arun, 2020; Fornaro and Wolf, 2020). This emerging literature has not explored the impact of the coronavirus pandemic on societal interaction in many countries especially for African countries that are vulnerable to the outbreak of diseases. To the best of my knowledge, this is the first paper that explore the socioeconomic impact of coronavirus and the policy response in African countries. The findings reveal that African countries have been affected by the coronavirus pandemic, and the effect was more severe for African regions compared to other regions. The rising pandemic affected social interaction and economic activities through the imposed social distancing policies that have different levels of strictness in several African countries.

The analysis in this paper contributes to the literature in two ways. First, it contributes to the literature that examine the impact of social policies on the wellbeing of individuals in society. (e.g., Lunau et al, 2013; Jutz, 2015; Acevedo et al, 2014; Li et al, 2016; Holt-Lunstad et al, 2010; McGuire, 2011). The present study contributes to this literature by exploring how social policies, such as social distancing policies, affect African societies. Secondly, this study contributes to the recent literature on the impact of coronavirus in society (e.g., Chinazzi et al, 2020; Haleem et al, 2020; Chen et al, 2020; Fornaro and Wolf, 2020). The paper contributes to this literature by exploring the socio-economic effect of coronavirus in African countries – a context that have not been explored in the literature.

The rest of the paper is divided as follows. Section 2 presents the literature review. Section 3 reports the study methodology. Section 4 discusses the results. Section 5 concludes.

2. Literature review

A body of literature explore the impact of social policies on the wellbeing of individuals in society. For instance, Lunau et al (2013) examine the effect of social policies on the health of older employees. They find that work stress is significantly associated with elevated risk of depression among older employees in European countries, however, protective labour and social policies reduced the strength of the association. Jutz (2015) examine the role of income inequality and redistribution in reducing income-related health inequalities in Europe. They find a negative association between social policies and health inequalities, which implies that social policies reduced health inequalities in Europe. They conclude that social policies matter to all individuals

regardless of socio-economic position since it is positively linked to overall population health. Acevedo et al (2014), in a review of literature, examine the pattern of poverty rates and income inequality in El Salvador, and find that migration and remittances provided an equalizing effect to mitigate income inequality rather than distributive public social expenditure or other public policies. Li et al (2016) investigate the impact of social assistance and the introduction of the Rental Assistance Program (RAP) on food insecurity rates among target groups in British Columbia. Using data from the Canadian Community Health Surveys, they find that food insecurity rose significantly among households in British Columbia between 2005 and 2012, and severe food insecurity remained unchanged despite the increase in social assistance benefits. Holt-Lunstad et al (2010) investigate the extent to which social relationships influence mortality risk. They find that there is a 50% increased likelihood of survival for participants with stronger social relationships, and the finding is consistent across age, sex, initial health status, cause of death, and follow-up period. McGuire (2011) show that social assistance and the public provision of many basic social services improved in Latin America even as the coverage of social insurance programs fell. Rapp et al (2018) examine how social policies shape the perceived feasibility of self-employment. They find that the presence of unemployment protection for the self-employed positively influence individual perceptions of the feasibility of self-employment. They also observe that risk-tolerant individuals are more likely to assess self-employment as a feasible option in countries that offer unemployment protection to the self-employed.

A recent body of literature explore the impact of coronavirus on society. For instance, Chinazzi et al (2020) show that, at the start of the travel ban from Wuhan on 23 January 2020, most Chinese cities had already received many infected travelers. The travel quarantine of Wuhan delayed the overall epidemic progression by only 3 to 5 days in mainland China but had a more severe effect on the international scale. Haleem et al (2020) show that COVID-19 has affected day to day life and is slowing down the global economy. They argue that the economic effects of coronavirus include: the slowing of the manufacturing of essential goods, disruption of the supply chain of products, losses in national and international business, poor cash flow in the market, significant slowing down in the revenue growth while the social consequences include the cancellation or postponement of large-scale sports and tournaments, disruption of celebration of cultural, religious and festive events, undue stress among the population, social distancing with peers and family members, closure of hotels, restaurants and religious places, closure of places for entertainment like movie and play theatres, sports clubs, gymnasiums, swimming pools etc. Chen et al (2020) show find that cities that suffered from SARS and have greater migration ties to Wuhan in China had early, stronger and more durable public awareness of the outbreak. Fornaro and Wolf (2020), using a simple model, show that the coronavirus triggered a negative supply shock. They suggest that drastic policy interventions - both monetary and fiscal - might be needed to prevent this negative supply shock from severely affecting employment and productivity.

Goodell (2020) suggest that there is need to examine COVID-19 in the context of other past events that in some ways are similar to the COVID-19 pandemic. Ramelli and Wagner (2020) showed that the health crisis transformed into an economic crisis which was amplified through financial channels. Barro et al (2020) examine whether the 1918-1920 Great Influenza Pandemic led to economic contraction and mortality. They find that higher flu death rates decreased the realized real returns on stocks and short-term government bills. Ozili and Arun (20120) find that the increasing number of lockdown days, monetary policy decisions and international travel restrictions severely affected the level of global economic activities and the closing, opening, lowest and highest stock price of major stock market indices in the World. Also, they observe that the imposed restriction on the internal movement of people and higher fiscal spending had a positive impact on the level of economic activities. Kuckertz et al (2020) states that the coronavirus (SARS-CoV-2) and the spread of COVID-19 led many governments to take drastic measures. They argue that the lockdown of large parts of society and economic life came as an exogenous shock to many economic actors and innovative startups. Oruonye and Ahmed (2020) find that the outbreak and spread of COVID-19 disease in Nigeria led to rapid shutdowns in cities and states across the country which severely affected the tourism industry. Zhang et al (2020) state that the coronavirus (COVID-19) affected financial markets all over the world. It created an unprecedented level of risk, causing investors to suffer significant loses in a very short period of time. Ozili (2020) analyse the Covid-19 spillovers to Nigeria and find that the existing structural weaknesses in Nigeria contributed to making the crisis more severe in the country.

3. Methodology

This study use discourse analysis to analyse the socio economic impact of COVID-19 in Africa. The analysis in this study was conducted using information obtained from several reputable sources such as the World Health Organisation (WHO), UNESCO and information obtained from the media and other public sources as shown in table 1.

The period of analysis is from March to May 2020. Focusing on this narrow period (from March to May) allows us to capture the events occurring at this time and to identify the significant effect of COVID-19 in Africa at a time when many African countries were imposing strict lockdown rules due to the rapidly spreading coronavirus in African countries.

The country selection covers all African countries that have publicly available information on country-specific coronavirus cases and policy response while African countries that did not have such reports or information were excluded from the analysis.

Data subject	Data Source	Data Period	Analysis Location
COVID-19 cases	World Health Organization	6 th May 2020	Section 4.1.
COVID-19 cases	Worldometer	6 th May 2020	Section 4.2.
Impact on education	UNESCO	March to May 2020	Section 4.3.6
Policy response	Media reports	March to May	Section 4.4.1
Policy response	OxCGRT	March to May	Section 4.4.2
Foreign aid spending	Reliable media sources	March to May	Section 4.5.2.2.

4. Discussion of Results

4.1. Analysis of COVID-19 information from the World Health Organization (WHO).

Data from the WHO suggest that Africa appears to be the least affected region compared to other regions as shown in table 2a and figure 1. European region has the largest number of confirmed COVID-19 cases, new cases, and total deaths and new deaths on the reporting date. The region of the Americas also has a high number of confirmed cases, new cases, total deaths and new deaths, which is greater than that of the Western Pacific, Eastern Mediterranean and Africa, combined. Africa has the lowest number of confirmed cases, new cases, total deaths and new deaths. This implies that the African region is the least affected region on the reporting date.

Region	Confirmed cases (total)	New cases	Confirmed deaths (total)	New deaths
Global	3,588,773	71,463	247,503	4,102
European Region	1,593,828	27,179	147,780	2,178
Americas	1,507,148	29,701	81,070	1,480
Western Pacific	154,884	1,016	6,327	40
Eastern Mediterranean	221,230	7,854	8,290	175
South-East Asia	76,998	4,310	2,821	139
Africa	33,973	1,403	1,202	90

Source: World Health Organization,¹ Situation report, No. 107

¹ https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200412-sitrep-83-covid-19.pdf?sfvrsn=697ce98d_4

Figure 1: W.H.O. Global COVID-19 statistics (06-May-2020)

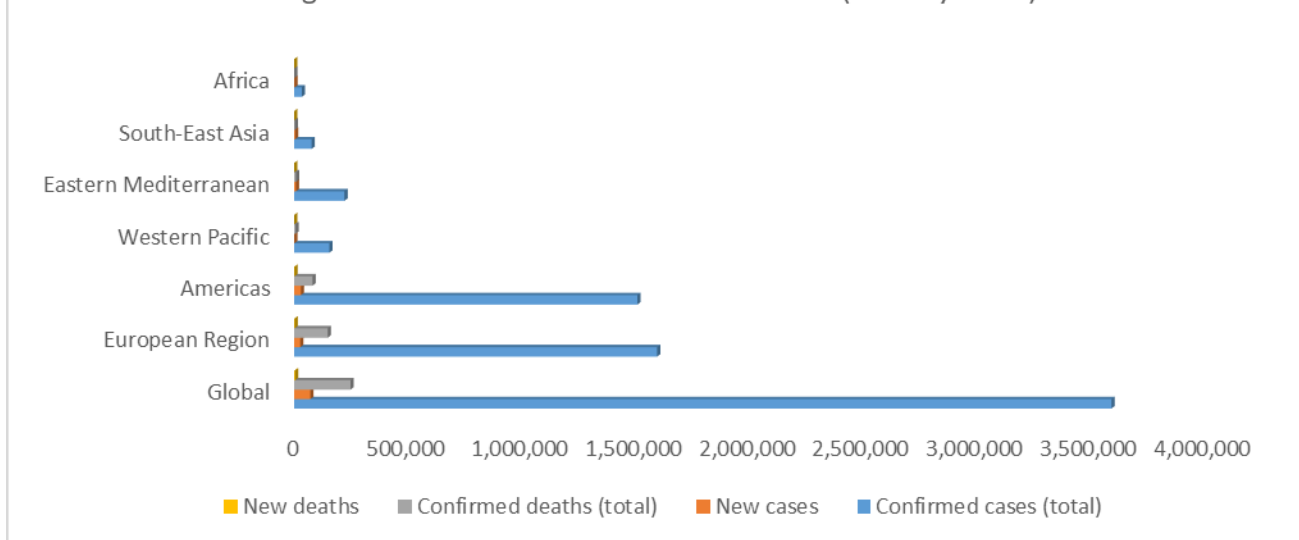


Table 2b and figure 2 reports a three-month trend for COVID-19 in Africa using the WHO data. The number of confirmed cases, new cases, total deaths and new deaths were lowest in March and highest in May, which suggest that the coronavirus is still rising at an exponential rate and this will have a negative effect on social interactions in the African society.

COVID-19 Africa Region	March 06	April 06	May 06
Confirmed cases (total)	19	6,616	33,973
New cases	1	198	1403
Confirmed deaths (total)	0	243	1202
New deaths	0	7	90
Source: World Health Organization, Situation report, No. 46, 77 and 107			

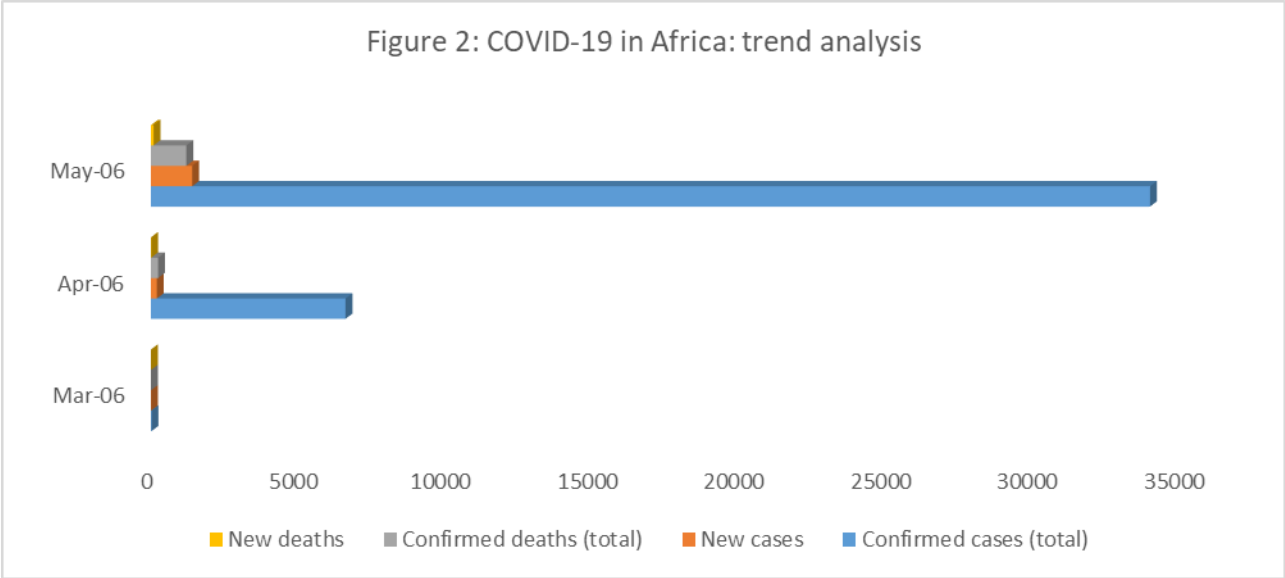
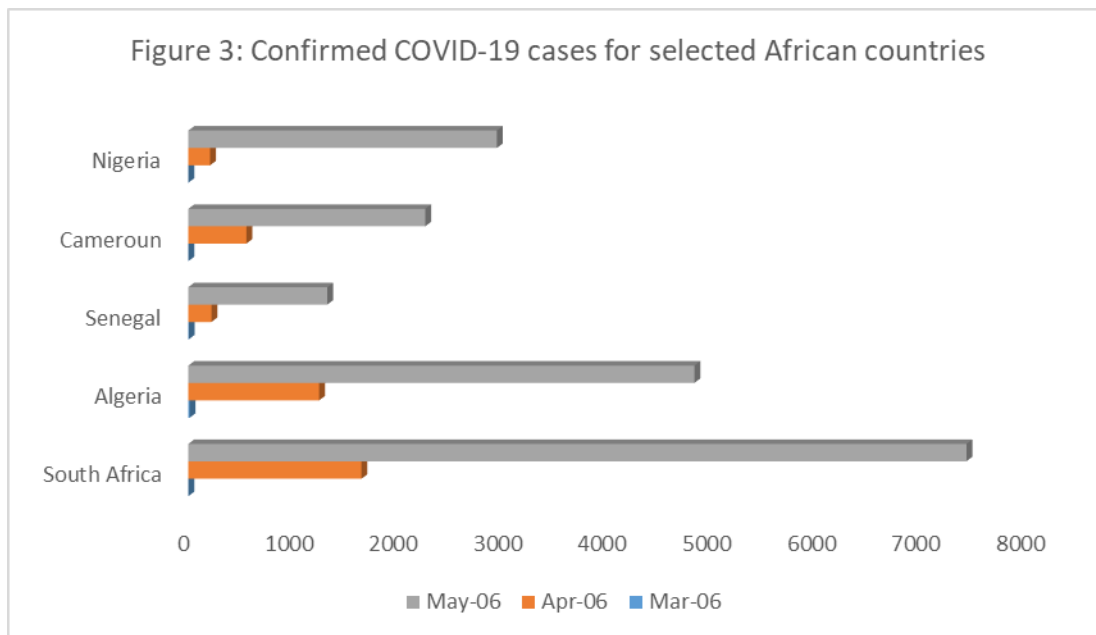


Table 2c and figure 3 shows the three-month-trend analysis for selected African countries using the WHO data. Nigeria, South Africa and Cameroon had the lowest number of confirmed cases in March while South Africa and Algeria the highest COVID-19 cases in May. The sociological implication is that the rising coronavirus cases in South Africa and Algeria can lead to social separation which can hurt social cohesion in these countries during these times.

	06-March	06-April	06-May
South Africa	1	1,655	7,439
Algeria	12	1,251	4,838
Senegal	4	222	1,329
Cameroon	1	555	2,265
Nigeria	1	208	2,950

Source: World Health Organization, Situation report, No. 46, 77 and 107



Together, the tables and figures show that the number of confirmed COVID-19 cases rose exponential within 30-day intervals from March to May in the African region, which indicates the rapid spread of the coronavirus during the crisis. The rising cases can lead to social separation which can hurt social cohesion in African countries while the crisis persist.

4.2. Analysis of COVID-19 in Africa using information from Worldometer

Real-time data for African countries collected from Worldometer on the 6th of May 2020. Worldometer is a reliable source of real-time data on world events. Worldometer collects the official COVID-19 statistics reported in each country. The sub-region analyses are discussed below.

4.2.1. North African region

Table 3a shows that the North African countries combined have the largest number of confirmed COVID-19 cases in Africa at 39.7% on the reporting date. The North African region also has the highest number of total recovery at 47.3% and the highest number of active cases in Africa at 39.5%. The North African region also has the highest number of infected African countries such as Egypt, Morocco, Algeria and Tunisia. This implies that the North African region was the most affected region in Africa on the reporting date with rising confirmed cases and total deaths on the reporting date.

Country	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered	Active Cases	Serious, Critical
Egypt	7,201		452		1,730	5,019	
Morocco	5,382	+163	182	+1	1,969	3,231	1
Algeria	4,838		470		2,067	2,301	22
Tunisia	1,022		43		482	497	17
Somalia	835		38		75	722	2
Sudan	778		45		70	663	
North Africa total	20,056		1,230		6,393	12,433	42
Overall Total:	50,502	+336	1,921	+4	17,118	31,463	128
Proportion (%)	39.71		64		47.3	39.5	32.8

4.2.2. East African region

Table 3b shows that the East African countries combined have 8.9% of the confirmed cases in Africa. The East African region also has the lowest number of total deaths at 5.1% and a low recovery and active cases at 12.9% and 6.9% respectively. Djibouti, Somalia and Kenya have the highest number of confirmed cases in East Africa while Somalia, Kenya and Tanzania report the highest number of total deaths in the region on the reporting date. Countries like Rwanda, Madagascar and Uganda did not report any death caused by COVID-19 compared to other East African countries. This suggest that the East African region was moderately affected compared to other African regions.

Country	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered	Active Cases	Serious, Critical
Djibouti	1,120		2		745	373	
Somalia	835		38		75	722	2
Kenya	535		24		182	329	2
Tanzania	480		16		167	297	7
Réunion	425	+1			300	125	2
Mauritius	332		10		319	3	3
Rwanda	261				129	132	
Ethiopia	162	+17	4		93	65	
Madagascar	151				101	50	1
Uganda	98				55	43	
Malawi	41		3		9	29	1
Eritrea	39				30	9	
Burundi	15		1		7	7	
Seychelles	11				8	3	
Comoros	3					3	
East Africa (total):	4,508		98		2,220	2,190	18
Overall Total:	50,502	+336	1,921	+4	17,118	31,463	128
Proportion (%)	8.9		5.1		12.9	6.9	14.1

4.2.3. West African region

Table 3c shows that the West African countries combined have 33% of the confirmed cases in Africa. The total number of deaths in the West African region is 21% which is much lower than that of the North African region. The West African region also has the lowest recovery cases at 2.4%. Nigeria, Ghana and Cameroon have the highest number of confirmed cases in West Africa while Benin, Gambia and Mauritania report the lowest number of confirmed cases and deaths in the region on the reporting date.

Country	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered	Active Cases	Serious, Critical
Nigeria	2,950		98		481	2,371	4
Ghana	2,719		18		294	2,407	4
Cameroon	2,104		64		953	1,087	12
Guinea	1,811		10		498	1,303	
Ivory Coast	1,464		18		701	745	
Senegal	1,329		11		470	848	6
Niger	763		38		543	182	
Burkina Faso	688		48		548	92	
Mali	612		32		228	352	
Guinea-Bissau	475	+62	2	+1	24	449	
Réunion	425	+1			300	125	2
Equatorial Guinea	315		3		13	299	
Sierra Leone	199		11		43	145	
Cabo Verde	186		2		37	147	
Liberia	170		20		58	92	
Chad	170		17		43	110	
Togo	128		9		74	45	
Benin	96		2		50	44	
Gambia	17		1		9	7	
Mauritania	8		1		6	1	
West African	16,629		405		405	5,410	28
Total:	50,502	+336	1,921	+4	17,118	31,463	128
Proportion (%)	32.9		21.1		2.4	17.2	21.9

4.2.4. Southern African region

Table 3d shows that the Southern African countries combined have 15.7% of the confirmed cases in Africa. The Southern African region accounts for 8.3% of the total deaths and a fairly low recovery and active cases at 16.9% and 15.4% respectively. South Africa and Zambia have the highest number of confirmed cases in Southern Africa while South Africa and Zambia report the highest number of deaths in the region on the reporting date. Countries like Mozambique and Namibia did not report any death caused by COVID-19 compared to other Southern African

countries. This suggest that the South African region was moderately affected compared to other African regions.

Country	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered	Active Cases	Serious, Critical
South Africa	7,572		148		2,746	4,678	36
Zambia	139	+1	4	+1	92	43	1
Mozambique	81				19	62	
Malawi	41		3		9	29	1
Zimbabwe	34		4		5	25	
Botswana	23		1		8	14	
Namibia	16				8	8	
Southern Africa (total)	7,906		160		2,887	4,859	38
Total:	50,502	+336	1,921	+4	17,118	31,463	128
Proportion (%)	15.7		8.3		16.9	15.4	29.7

4.2.5. Central African region

Table 3e shows that the Central African countries combined have 8.6% of the confirmed cases in Africa. The Central African region accounts for just 7.3% of the total deaths and a fairly low recovery and active cases at 7.3% and 9.3% respectively. Cameroon and Gabon have the highest number of confirmed cases in Central Africa while Cameroon has the highest number of deaths in the region on the reporting date. Countries like the Central African Republic did not report any death caused by COVID-19 compared to other Central African countries. This suggest that the Central African region was moderately affected compared to other African regions such the West African and North African countries.

Country	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered	Active Cases	Serious, Critical
Cameroon	2,104		64		953	1,087	12
Gabon	397		6		93	298	1
Equatorial Guinea	315		3		13	299	
Sao Tome and Principe	174		3		4	167	
Central African Republic	85				10	75	
Angola	36		2		11	23	
Chad	170		17		43	110	
Congo	236		10		26	200	
Democratic Republic of Congo	797	+92	35	+1	92	670	
Gambia	17		1		9	7	
Central African countries (total)	4,331		141		1,254	2,936	13
Total:	50,502	+336	1,921	+4	17,118	31,463	128
Proportion (%)	8.6		7.3		7.3	9.3	10.2

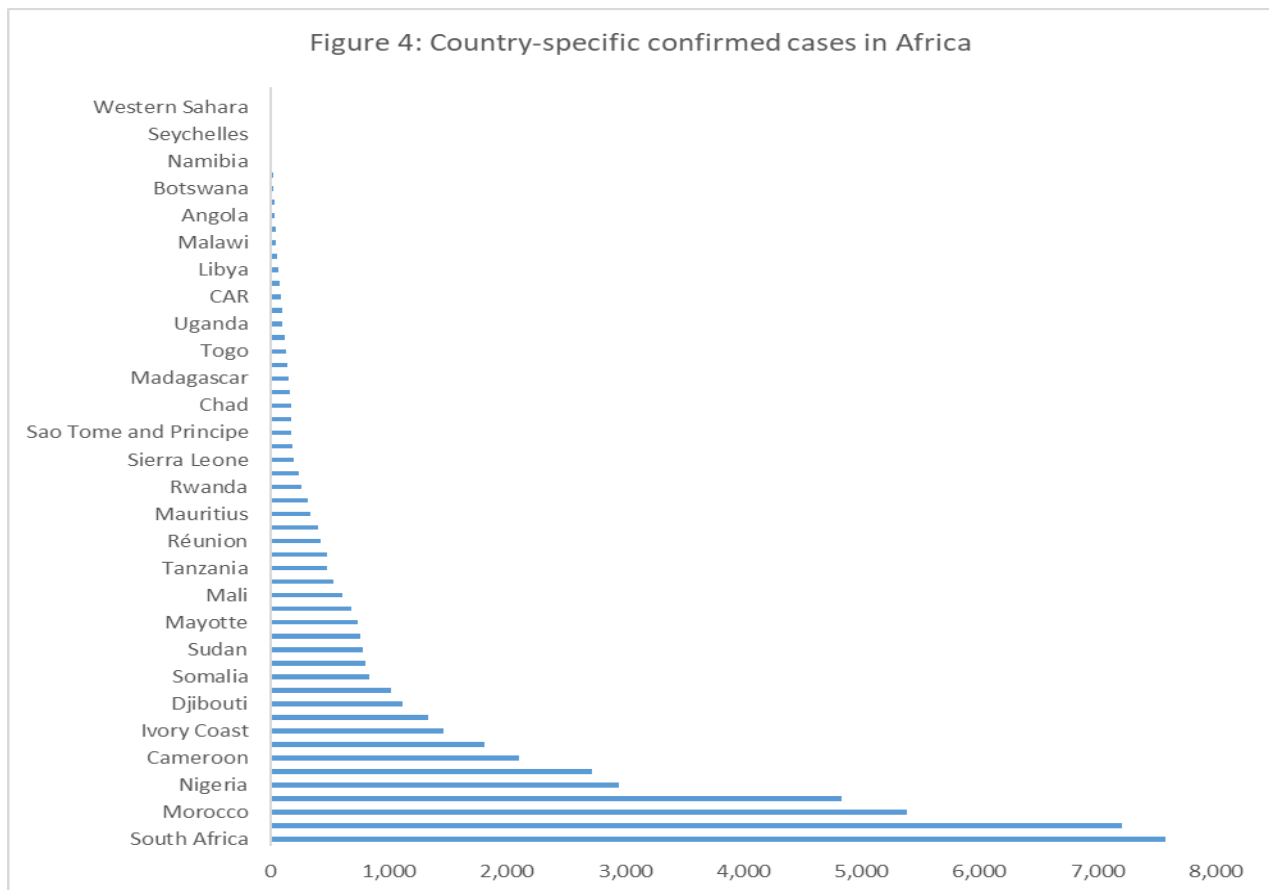
4.2.6. Country-level analysis

The data, reported in table 3f, shows that some African countries have more severe cases than others. For instance, South Africa, Egypt, Morocco, Algeria, Nigeria, Ghana and Cameroon have the highest number of total confirmed cases and total deaths in Africa while Comoros, Western Sahara and Mauritania have the lowest number of confirmed cases in Africa on the reporting date.

Country	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered	Active Cases	Serious, Critical
South Africa	7,572		148		2,746	4,678	36
Egypt	7,201		452		1,730	5,019	
Morocco	5,382	+163	182	+1	1,969	3,231	1
Algeria	4,838		470		2,067	2,301	22
Nigeria	2,950		98		481	2,371	4
Ghana	2,719		18		294	2,407	4
Cameroon	2,104		64		953	1,087	12
Guinea	1,811		10		498	1,303	
Ivory Coast	1,464		18		701	745	
Senegal	1,329		11		470	848	6
Djibouti	1,120		2		745	373	
Tunisia	1,022		43		482	497	17
Somalia	835		38		75	722	2
Democratic Republic of Congo	797	+92	35	+1	92	670	
Sudan	778		45		70	663	
Niger	763		38		543	182	
Mayotte	739		9		352	378	6
Burkina Faso	688		48		548	92	
Mali	612		32		228	352	
Kenya	535		24		182	329	2
Tanzania	480		16		167	297	7
Guinea-Bissau	475	+62	2	+1	24	449	
Réunion	425	+1			300	125	2
Gabon	397		6		93	298	1
Mauritius	332		10		319	3	3
Equatorial Guinea	315		3		13	299	
Rwanda	261				129	132	
Congo	236		10		26	200	
Sierra Leone	199		11		43	145	
Cabo Verde	186		2		37	147	
Sao Tome and Principe	174		3		4	167	
Liberia	170		20		58	92	
Chad	170		17		43	110	
Ethiopia	162	+17	4		93	65	
Madagascar	151				101	50	1
Zambia	139	+1	4	+1	92	43	1
Togo	128		9		74	45	
Eswatini	119		1		12	106	
Uganda	98				55	43	
Benin	96		2		50	44	
Central African Republic	85				10	75	
Mozambique	81				19	62	
Libya	63		3		24	36	

South Sudan	52					52	
Malawi	41		3		9	29	1
Eritrea	39				30	9	
Angola	36		2		11	23	
Zimbabwe	34		4		5	25	
Botswana	23		1		8	14	
Gambia	17		1		9	7	
Namibia	16				8	8	
Burundi	15		1		7	7	
Seychelles	11				8	3	
Mauritania	8		1		6	1	
Western Sahara	6				5	1	
Comoros	3					3	
Total:	50,502	+336	1,921	+4	17,118	31,463	128

Overall the findings from the analysis in this section shows that countries in the North African region are the most affected by the COVID-19 pandemic in Africa on the reporting date while countries in the Central and Southern African regions are least affected by the pandemic. The rising coronavirus cases can hurt social cohesion especially in Northern African countries that share similar cultural values. The lack of trust and social interaction among societal members due to fear of contracting the disease will affect social cohesion in these times (see figure 4).



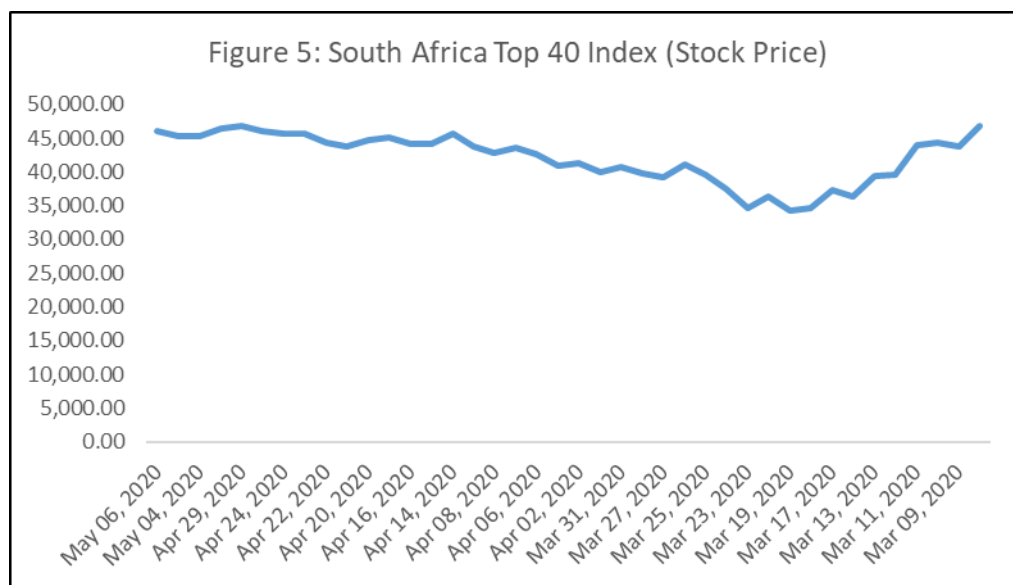
4.3. Socioeconomic impact

4.3.1. Impact on Aviation Sector in Africa

Several markets reacted to the coronavirus pandemic and a number of industries were affected from the COVID-19 shock (Ozili and Arun, 2020). The global demand for air travel, including travel in and out of Africa, dropped significantly and the resulting loss of revenue was estimated at US\$113bn according to the International Air Transport Association (IATA) estimates.² African Airlines lost US\$400m (£312m) since the outbreak of the coronavirus in China in February, according to the IATA. The pandemic was not as widespread in Africa compared to Europe and Asia, but it led airlines like South African Airways, Royal Air Maroc, Air Tanzania, Air Mauritius, Ethiopian Airlines, EgyptAir, RwandAir and Kenya Airways to suspend flights to and from China.³

4.3.2. Financial Market reactions in Africa

Financial markets in Africa were also affected by the coronavirus pandemic. In South Africa, the Johannesburg Stock Exchange Top 40 Index, many of which have exposure to China, slumped 3.7% on the 24th of February as investors began to consider short-selling strategies.⁴ Figure 5 shows the decline in stock prices in the SA Top 40 Index in March following the announcement of coronavirus cases in South Africa.



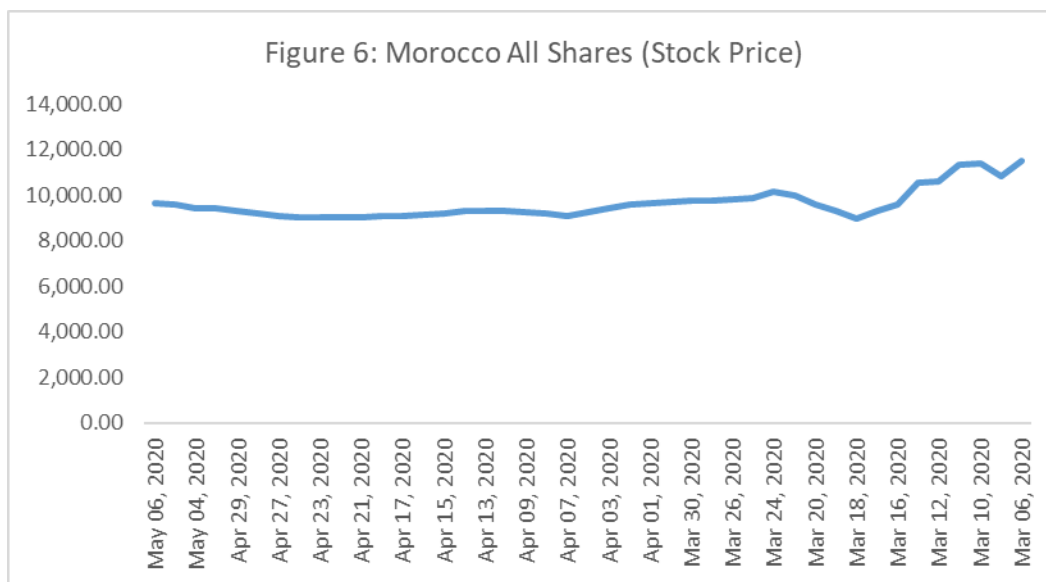
In Morocco, the All Shares Index fell in March in response to the announcement of confirmed coronavirus cases in Morocco which led to loss of value in investment equity in the stock

² <https://www.iata.org/en/pressroom/pr/2020-03-05-01/>

³ <https://www.bbc.com/news/topics/cdl8n2edxept/mauritius>

⁴ <https://www.theafricareport.com/23770/coronavirus-and-the-case-for-shorting-china-exposed-south-african-stocks/>

exchange as shown in figure 6. In Kenya, major stocks such as Safaricom and KCB Bank declined by 5.4 per cent and 7 per cent respectively on the first day the first coronavirus case was announced in Kenya. As stock prices continued to plunge on the second day, the Nairobi Stock Exchange (NSE) suspended trading for the NSE 20 index on March 13, 2020 according to its equity trading rules which require trading suspension if there was a drop of more than five per cent.⁵ In the tourism sector, tourism to South Africa fell by about 80 percent following the COVID-19 outbreak, and the situation further worsened when a nationwide lockdown was enforced in South Africa. Kenya also witnessed a 55 percent fall in tourist visits following the coronavirus outbreak.



4.3.3. Impact on the health care sector

The health systems in African countries are fragile and highly vulnerable to an outbreak compared to the health systems of developed countries. Although African countries appear to be the least affected by coronavirus at the time of writing, there are concerns that the rising coronavirus cases will overwhelm Africa’s fragile health infrastructure, and that many more Africans will die of diseases left untreated than from the virus or its complications. Currently, Africa has 2 medical doctors per 10,000 persons while Italy has 41 medical doctors per 10,000 people according to data obtained from Bloomberg⁶. This shows the weakness of Africa’s health system. For instance, in South Africa, the country’s healthcare system is already struggling and over 500 health workers have contracted the COVID-19 disease⁷. Wealthy individuals receive treatment in private hospitals while poor residents are left to rely on state hospitals that are

⁵ <https://www.nation.co.ke/business/Economic-cost-of-coronavirus-Kenya/996-5492854-gnf7jh/index.html>

⁶ <https://www.bloomberg.com/news/articles/2020-03-11/africa-s-struggling-health-care-systems-brace-for-coronavirus>

⁷ <https://www.aa.com.tr/en/africa/over-500-s-african-health-workers-contract-covid-19/1831768>

already filled to capacity and this will lead to more deaths among poor residents. In Egypt, the health system was ill-prepared to deal with the coronavirus. There was shortage in medical supplies, lack of testing, and insufficient protective gear which endangered the lives of doctors, nurses and the patients' families in Egypt. Over 15 health practitioners (12 nurses and 3 doctors) tested positive for coronavirus⁸. In Morocco, the coronavirus crisis overwhelmed the existing health care system which led the authorities to set up a field hospital of 700 bed capacity at Casablanca's exhibition center which cost about USD\$4.5 million,⁹ however, there have been concerns that only a few privileged residents receive priority treatment in the newly created crisis-hospitals. The World Health Organization (WHO) had warned that countries with poor healthcare systems may not be able to cope with the coronavirus outbreak with many in Africa being of particular concern.

4.3.4. Sociological impact on African societies

The coronavirus crisis is affecting all segments of the African population especially social groups in the most vulnerable situations including people living in poverty, older persons, persons with disabilities, youth, and indigenous peoples. For example, homeless people in African countries are unable to find safe shelter and are highly exposed to the danger of coronavirus. People without access to running water, refugees, migrants, or displaced persons will also suffer disproportionately both from the coronavirus pandemic and the resulting economic effect such as fewer employment opportunities, etc. If the social crisis caused by coronavirus is not properly addressed through social policy, the COVID-19 pandemic may also increase inequality, exclusion, discrimination and global unemployment in African countries in the medium and long term. Restrictive measures, particularly those that limit social interaction such as lockdowns, were imposed in many African countries which severely affected social events, communal meetings, entertainment events and other social activities that promote social development because large parts of the African society depend on person-to-person interactions.

4.3.5. Impact on debt-laden and oil-dependent African countries

The immediate shock to African countries resulted from the global supply chain disruptions due to the lockdown in China and also due to the falling oil price that hurt oil-dependent African countries such as Nigeria and Angola. For instance, during the coronavirus crisis, Nigeria was exposed to a significant drop in oil prices which hit the Nigerian economy hard as it could not sell its oil to foreign buyers, and this led to loss of oil revenue to Nigeria. Also, Nigeria's 2020 budget which was planned at an anticipated oil price of USD\$57 was no longer sustainable and the budget had to be revised downward to USD\$30 per barrel.

⁸ <https://www.al-monitor.com/pulse/originals/2020/04/egypt-coronavirus-pandemic-health-system-stress-doctors.html>

⁹ <https://thearabweekly.com/morocco-increasing-hospital-bed-capacity-fight-coronavirus>

The global supply chain disruption and low commodity prices are putting pressure on African countries and pushing them close to default. Zambia is already considering debt restructuring while Angola is facing the highest risk for a potential debt restructuring because its debt-to-GDP was 90% in 2018.

4.3.6. Impact on education

The government of many African countries temporarily closed all educational institutions in an attempt to contain the spread of the COVID-19 pandemic as shown in the table 4 below. Table 4 shows that many African countries shut down all schools, and some African countries closed down their schools much earlier than other African countries. For instance, in Morocco, the education minister announced the closure of all schools and universities starting from March 16 until an indefinite date as a precautionary measure against the coronavirus outbreak and that classes will be substituted by distance learning. In Ethiopia, the Prime Minister announced the closure of schools across the country and banned all public gatherings, including sports events. In Tanzania, the Prime Minister extended closure of schools for an indefinite period. These are just few examples of the many closures announced in almost all African countries. The nationwide school closures in many African countries are impacting over 85% of the Africa's student population. Some non-African countries have implemented local closures rather than nationwide closure which means that only some schools will be closed in some communities rather than a nationwide school closure. More so, UNESCO recommended the use of distance learning programs and open educational applications and platforms that schools and teachers can use to reach learners remotely and limit the disruption of education¹⁰. But the absence of a robust online learning platform or distance learning educational programs in some African countries is making the continuity of education very difficult in these African countries. Also, the closure of schools can lead to an increase in crime rate by the youth population. The fewer number of people on the street of African countries will decrease crimes such as burglaries but other types of crimes will increase such as break-ins or vandalism of offices and small businesses, increase in online fraud and increase in domestic violence due to the stay-home policies.

¹⁰ <https://en.unesco.org/news/290-million-students-out-school-due-covid-19-unesco-releases-first-global-numbers-and-mobilizes>

Country	Region	Effect of COVID-19 on education	Lockdown duration
Egypt	North Africa	National closure of all schools	From March 16
Morocco	North Africa	National closure of all schools	From March 16
Algeria	North Africa	National closure of all schools	From March 13
Kenya	East Africa	National closure of all schools	From March 16
Tanzania	East Africa	National closure of all schools	From March 19
Ethiopia	East Africa	National closure of all schools	From March 16
Rwanda	East Africa	National closure of all schools	From March 16
Mauritius	East Africa	National closure of all schools	From March 19
Nigeria	West Africa	National closure of all schools	From March 26
Ghana	West Africa	National closure of all schools	From March 16
Cameroon	West Africa	National closure of all schools	From March 18
Senegal	West Africa	National closure of all schools	From March 16
Liberia	West Africa	National closure of all schools	From March 16
Namibia	Southern Africa	National closure of all schools	From March 16
Zimbabwe	Southern Africa	National closure of all schools	From March 24
South Africa	Southern Africa	National closure of all schools	From March 18
Zambia	Southern Africa	National closure of all schools	From March 20
Gabon	Central Africa	National closure of all schools	From March 16
Angola	Central Africa	National closure of all schools	From March 24
Equatorial Guinea	Central Africa	National closure of all schools	From March 15

4.4. Policy response: what African countries are doing

4.4.1. Policy response

Below are other policy responses that African countries have already taken.

Morocco: Foreign citizens returning to Morocco were put under a mandatory 20-day quarantine in a Rabat military hospital. Screening was introduced at all entry points including airports in late January. Free testing was made available to the public. The government ban all inbound and outbound travels to France and Spain. Morocco suspended all school activities until further notice. The government officially declared a “Health State of Emergency” until May. The nationwide lockdown and curfew were enforced by the police and the army, only individuals leaving home with a special permit are allowed to go to their workplace. Authorities arrested thousands of individuals for violating the state of emergency or for spreading false information. The government also released thousands of offenders from its prisons to prevent the death of prisoners due to coronavirus.

Angola: The authorities declared a state of emergency on 27 March resulting in a two-week lockdown which was subsequently extended. The government developed a plan to control the coronavirus pandemic through: (i) coordination, (ii) risk communication and community engagement, (iii) infection prevention and control, (iv) continuity of health care and nutrition; (v) continuous access to education and child protection services; (vi) social policy such as cash transfer and social services referral, (vii) the development of e-learning training packages, (viii) procuring protective and critical supplies including 8,700 different masks, 150 infra-red thermometers, 2,500 gloves, 2,500 liters of hand sanitizer to strengthen infection prevention and control.

Some policy responses are summarized in Table 5.

S/N	Measures	African countries
1	State loans or credit guarantees for companies	Nigeria, South Africa
2	Income subsidies for affected workers	None, no African country
3	Tax deferrals	None, no African country
4	Regulatory forbearance to banks and corporate debtors	Nigeria
5	Social security deferrals or subsidies	None, no African country
6	Central bank grants debt repayment holidays such as loan moratoriums	Egypt, Nigeria
7	Salary donation or pay-cut by top public officials to contribute to coronavirus relief funding	Rwanda, Kenya, Malawi, Nigeria, South Africa
8	President takes a pay-cut, donates salary	Mali, Algeria, South Africa, Rwanda, Malawi
9	Provision of free water supply, food with government bearing the cost during the pandemic	Ghana, Rwanda
10	Tax holiday	Ghana
11	Countries that received support from foreign billionaires ¹¹	Nigeria, Zimbabwe, Ethiopia, Rwanda, Cameroon
12	Countries that sought and received support from local billionaires	Nigeria, South Africa ¹²
13	Cash payments to all citizens to help them cope with financial difficulty during the pandemic	Malawi, Nigeria.
14	Corporate bailouts	Nigeria
15	Seeking debt forgiveness and other debt relief to reduce the economic impact of coronavirus	sub-Saharan Africa countries
16	Adopting accommodative monetary policies by central banks such as reducing interest rate.	Congo, Nigeria, Egypt, Kenya
17	Good Samaritans and philanthropists donating food supplies	South Africa, Nigeria
18	Countries that received UN & UNESCO support	Angola.
19	Releasing prisoners	Nigeria, South Africa, Cameroon

¹¹ Billionaires that provided financial and non-financial support such as protective gear and test kits to some Africa countries are Jack Ma of Ali Baba Conglomerates, Mike Bloomberg

¹² Billionaires such as Patrice Motsepe, the Oppenheimer and Rupert families in South Africa; Aliko Dangote & Folorunsho Alakija of Nigeria;

4.4.2. Stringency of common policy response

Several social policies were implemented in African countries with varying degrees of strictness. Data was collected from the 'Oxford COVID-19 Government Response Tracker (OxCGRT)' which is a database that collects information on several different common policy responses governments have taken, scores the stringency of such measures, and aggregates these scores into a common Stringency Index. Table 6 shows the stringency index of some common policies adopted in African countries, namely: school closing (SC); workplace closing (WPC); cancel public events (CPE); restrictions on gathering (ROG); close public transport (CPT); stay at home requirement (SHR); restrictions on internal movement (RIM); international travel controls (ITC); income support (IS). A higher index means the policies are very strict while a lower index means the policies are less strict.

As can be seen, all African countries adopted a strict school closing (SC) policy except Sudan. Workplace closing (WCP) policies are strictly enforced in countries like Morocco, Mauritius and Rwanda while WCP policies are less strict in Nigeria, Malawi and Sudan. The CPE policies are strictly enforced in countries like Angola and Burkina while CPE policies are less strict in Sudan. The ROG policies are strictly enforced in countries like Angola, Djibouti and Ethiopia while ROG policies are less strict in Egypt and Sudan. The CPT policies are strictly enforced in countries like Sudan, Nigeria and Rwanda while CPT policies are less strict in Mozambique, Malawi and Namibia, among others. The SHR policies are strictly enforced in countries like Djibouti, Kenya and Rwanda while SHR policies are less strict in Ghana, Namibia and Sudan. The RIS policies are less strict in Ghana, Malawi and Namibia compared to other African countries. Also, the ITC policy was less strict in Sudan compared to other African countries. The IS policies are stricter in Morocco, Mali and Zimbabwe. The implication is that the varying level of policy strictness will have dissimilar social impact on citizens especially poor people and excluded social groups in the African society.

(Table 6)

Country	Date	SC	WPC	CPE	ROG	CPT	SHR	RIS	ITC	IS
Angola	2020-05-06	3	2	2	4	1	2	2	4	
Burkina Faso	2020-05-06	3	3	2	1	1	2	2	4	0
Djibouti	2020-05-06	3	3	2	4	2	3	2	4	0
Egypt	2020-05-06	3	2	2	1	2	2	2	4	0
Ethiopia	2020-04-30	3	2	2	4	1	1	2	2	0
Gabon	2020-04-25	3	3	2	4	1	2	2	4	0
Ghana	2020-05-06	3	1	2	3	1	0	0	4	
Kenya	2020-05-04	3	2	2	4	2	3	2	4	
Morocco	2020-04-30	3	3	2	2	2	2	2	4	1
Mali	2020-04-30	3	0	2	3	2	1	2	3	1
Mozambique	2020-05-04	3	0	2	3	0	1	0	2	
Mauritius	2020-05-06	3	3	2	3	1	2	1	4	
Malawi	2020-05-06	3	0	2	3	0	1	0	4	
Namibia	2020-05-06	3	2	2	4	0	0	0	2	
Nigeria	2020-05-06	3	2	2	3	2	2	2	4	
Rwanda	2020-04-30	3	3	2	4	2	3	2	4	0
Sudan	2020-03-13	0	0	0	0	0	0	0	0	0
Sudan	2020-04-25	3	1	2	3	2	2	2	4	0
Sierra Leone	2020-04-30	3	0	2	3	0	1	2	4	0
Seychelles	2020-04-30	3	3	2	4	2	2	2	3	0
Tunisia	2020-05-06	3	3	2	4	1	2	2	3	1
South Africa	2020-04-30	3	3	2	3	1	2	2	4	1
Zambia	2020-05-01	3	0	2	4	0	2	2	4	
Zimbabwe	2020-05-04	3	3	2		1	2	2	4	1

SC = School closing; WPC = Workplace closing; CPE = Cancel Public events; ROG = Restrictions on gathering; CPT = Close Public Transport; SHR = Stay at home requirement; RIM = restrictions on internal movement; ITC = international travel controls; IS = income support.

4.5. Responding with social distancing and government spending

4.5.1. Social distancing

Social distancing policies were enforced in African countries to first isolate the virus and then expel the virus out of society. Social distancing policies and lockdowns in African countries were initially adopted to protect vulnerable people such as pregnant women, families with children, older adults and disabled people, and was later extended to a nationwide lockdown. Nigeria imposed at least a four-week lockdown, South Africa imposed a three-week lockdown, Ghana imposed a two-week lockdown – all of which were further extended by the authorities. The social

distancing policy caused hunger to many poor households and many African countries did not make cash transfers payments to support households during crisis.

Social distancing policies have attracted wide criticisms from sociologists and economists. Some argue that social distancing will trigger a painful recession (Ozili and Arun, 2020). Others argue that social policies, such as social distancing, cannot prevent the coronavirus from mutating in the body of infected patients (Sadati et al., 2020), and that using old-style public health measures such as social distancing to address the novel coronavirus is not the best solution and could lead to unintended consequences (Wilder-Smith and Freedman, 2020), while others have branded social distancing policies as a nonscientific policy by policy makers borne out of confusion of not knowing what to do (Sadati et al., 2020).

4.5.2. Responding with government spending and foreign aid

4.5.2.1. Domestic spending

Only few African countries used large public funds to mitigate the effects of the coronavirus pandemic. Nigeria announced a NGN3.5trillion (US\$9.1bn) coronavirus relief fund (Ozili, 2020). Gambia announced a D500million (US\$9.8m) coronavirus relief fund. Ghana announced a US\$100 million relief fund to expand infrastructure, buy materials and equipment and to improve public education. Morocco announced an initial 2 billion dirhams (US\$200 million) to help the health sector cope with the coronavirus outbreak.¹³ Few African countries solicited for private sector donations to raise additional coronavirus relief funds due to insufficient public funding, such as Ghana, Nigeria, Rwanda and South Africa. The total domestic national spending in African countries only accounted for about 25% of the total funds, both domestic and foreign, that was raised by African countries to respond to the COVID-19 pandemic while foreign loans and foreign grants accounted for 75 per cent of total spending.

4.5.2.2. Foreign aid spending

Many African countries received international loan, donations or grants to raise coronavirus relief fund during March to May of 2020. The World Bank gave the Kenyan government US\$60 million (Sh6.1 billion) to help combat the coronavirus pandemic.¹⁴ The UK's Department for International Development (DFID) provided approximately K1.7 billion (£1.8 million or US\$2.24 million) to UNICEF to strengthen Malawi's capacity to prevent a COVID-19 outbreak in the country.¹⁵ The World Bank approved US\$14.25 million to support Rwanda's response to the coronavirus

¹³ <https://www.reuters.com/article/us-health-coronavirus-morocco/morocco-to-spend-200-million-to-brace-health-system-for-coronavirus-idUSKBN21E33Q>

¹⁴ <https://www.worldbank.org/en/news/press-release/2020/04/02/kenya-receives-50-million-world-bank-group-support-to-address-covid-19-pandemic>

¹⁵ <https://www.unicef.org/malawi/press-releases/uk-aid-provides-17-billion-kwacha-covid-19-coronavirus-prevention-and-preparedness>

pandemic.¹⁶ The US government provided US\$6 million in humanitarian assistance to Libya for COVID-19 response.¹⁷ The World Bank provided US\$47 million to support the Democratic Republic of Congo during the coronavirus pandemic,¹⁸ while the U.S. government provided an additional US\$6 million in humanitarian funding to the Democratic Republic of Congo to fight COVID-19 pandemic, bringing the total funding to US\$53million. The World Bank's International Development Association (IDA) approved a US\$2.5 million grant to assist the government of Sao Tome and Principe in responding to the threat posed by the COVID-19 pandemic.¹⁹ The World Bank also approved a US\$10 million IDA grant for Gambia to provide emergency assistance in fighting the COVID-19 pandemic.²⁰ Egypt received US\$7.9 million from the World Bank in support of its coronavirus emergency response.²¹ The International Monetary Fund (IMF) approved US\$745 million to Tunisia to address the COVID-19 pandemic.²² A summary of the foreign support received by African countries is reported in table 7.

Interestingly, an African country, Equatorial Guinea, donated a \$2million solidarity contribution to China to help the Chinese government in fighting the coronavirus that halted China's economy in February 2020.²³ Equatorial Guinea became the first and the only African country to donate funds to help an advanced economy to cope with the COVID-19 pandemic. The decision of Equatorial Guinea's Council of Minister to financially support China's fight against the virus was due to the long-standing relationship between both countries whose cooperation had grown stronger in recent years.

¹⁶ <https://www.aa.com.tr/en/africa/world-bank-lends-rwanda-14-million-to-fight-covid-19/1799348>

¹⁷ <https://ly.usembassy.gov/the-us-commits-6-million-usd-in-humanitarian-assistance-to-libya-for-the-covid-19-response/>

¹⁸ <https://www.worldbank.org/en/news/press-release/2020/04/02/the-world-bank-group-provides-47-million-to-support-the-democratic-republic-of-congos-response-to-the-coronavirus-pandemic>

¹⁹ <https://www.worldbank.org/en/news/press-release/2020/04/02/sao-tome-and-principe-to-boost-preparedness-for-covid-19>

²⁰ <https://www.worldbank.org/en/news/press-release/2020/04/02/world-bank-supports-the-gambias-covid-19-response>

²¹ <https://www.worldbank.org/en/news/press-release/2020/04/02/egypt-world-bank-provides-us79-million-in-support-of-coronavirus-covid-19-emergency-response>

²² <https://www.cnbcafrica.com/africa-press-office/2020/04/11/coronavirus-tunisia-international-monetary-fund-imf-executive-board-approves-a-us745-million-disbursement-to-tunisia-to-address-the-covid-19-pandemic/>

²³ <https://www.cnbcafrica.com/africa-press-office/2020/02/05/equatorial-guinea-agrees-on-2m-solidarity-contribution-to-support-chinas-fight-against-coronavirus/>

S/N	African country	Funder	Amount
1	Egypt	World Bank	US\$7.9 Million
2	The Gambia	The World Bank's IDA	\$10 million grant
3	Sao Tome and Principe	The World Bank's IDA	a \$2.5 million grant
4	Congo	World Bank (\$47m) and US Government (\$6m)	US\$53 million
5	Libya	US government	\$6 million
6	Rwanda	World Bank	\$14.25 million
7	Malawi	UK's DFID	\$2.24 million
8	Kenya	World Bank	US\$60 million
9	Senegal	World Bank	\$20 million
10	Djibouti	World Bank	US\$5 million
11	South Sudan	World Bank	\$7.6 million
12	Somalia	U.S. government	\$7 million
13	Sierra Leone	World Bank	\$7.5 million

4.5.3 Some reflection and criticism

Many African governments have received foreign loans from foreign lenders to help them cope with the economic impact of the coronavirus outbreak. Although such financial support is needed at this time, the foreign loans granted to some African countries are large, and exceed 40% of annual GDP for some African countries, which can put these countries at risk by increasing their levels of indebtedness to unsustainable levels, and the economic effects of such high debts levels will be felt when repaying the loans after the pandemic is over. Perhaps, instead of borrowing from foreign lenders, African governments could have looked inwards by borrowing domestically which will help to reduce the public debt burden of the nation, for instance, they can issue long term bonds or short term bonds through the sale of treasury bills and other long-term instruments to domestic investors. Generally, there are strong concerns that African countries that have incurred high public debt levels are at risk of severe economic shocks after the COVID-19 pandemic is over, and it is difficult to tell if foreign lenders will consider loan forgiveness or loan restructuring based on the principle of solidarity.

4.6. Opportunities created by the COVID-19 pandemic

Develop the capacity of health systems. Whenever there is a public health crisis, the first priority in any country is to protect the health of its citizens. For this reason, African countries should consider adopting budgetary liquidity and policy measures to increase the capacity of their health systems to withstand a public health crisis, and provide relief to citizens that fall sick during a public health crisis.

Strengthen protection for small and medium-sized businesses during crises. The survival of small and medium-sized enterprises (SMEs) is crucial during this pandemic. Policy makers should protect and support SMEs by providing guarantees to banks and micro-lenders so that lenders can provide liquidity to at least 50,000 African small and medium-sized enterprises. The economic impact of coronavirus on small and medium-sized enterprises (SMEs) will vary across industries and firms depending on many factors, including exposure to China. China is the largest source of primary and intermediate raw materials for most SMEs. Also, SMEs that have the greatest exposure to the global supply chain should receive more support than others.

Protect jobs and workers. Protecting the critical sectors of the economy, assets, technology and infrastructure is important, and above all, jobs and workers must be protected. African governments should introduce new legislation to protect the livelihoods of citizens which is essential to reboot the economy after a health pandemic is over. New legislations should be created to mitigate unemployment risks during crises. These kind of legislations can help to sustain families' income, preserve the productive capacity of workers and the human capital of enterprises and the overall economy.

Social welfare legislation and programs. Legislation and programs should be designed to support those in need especially the poorest who may not survive a health or economic crisis. The government should provide assistance, including food, clothing and other essential items for personal use, e.g. shoes, soap and shampoo, to those that are deprived of basic subsistence during a crisis. These provisions will make the delivery of food aid and basic items possible through electronic vouchers, thus, reducing the risk of contracting diseases during a health crisis. Social welfare legislations should be passed in African countries to provide welfare to the poorest.

Support for the agricultural sector. One sector where governments should not tolerate any disruption is that of food in the agricultural sector. African government must stand by food farmers. There should be no disruption to the agricultural sector during a crisis. There should be a range of measures to ensure that farmers and other beneficiaries can get the support they need. For instance, there should be agricultural programs that allow farmers to benefit from a maximum aid of \$5,000 per farm while food processing and marketing companies can benefit from a maximum of \$20,000. Table 8 below report the suggested opportunities for some African countries after the coronavirus crisis ends.

Table 8: COVID-19 Opportunities	
Country	Opportunities
Tanzania	(i) use legislation to pass an economic relief bill into law
South Africa	(ii) make private health care affordable to poor citizens
Ghana	(iii) use legislation to pass an economic relief bill into law
Mauritius	(i) preserve the existing social welfare system (ii) use legislation to pass an economic relief bill into law (iii) expand the capacity of the country's health system
Guinea	(i) use legislation to pass an economic relief bill into law (ii) preserve the social welfare system
Sierra Leone	(i) create a well-functioning distance learning education system (ii) use legislation to an economic relief bill into law
Kenya	(i) improve self-sufficient food production (ii) improve the health care system (iii) use legislation to pass an economic relief bill into law
Nigeria	(i) repair the public health system (ii) use legislation to create a national welfare system (iii) create a well-functioning digital economy (iv) establish a digital learning platform

5. Conclusion

This article discussed the effect of coronavirus on African countries and suggest opportunities for reforms. The findings reveal that the coronavirus outbreak in Africa affected the social and economic well-being of most citizens in many African countries during the period even though the social distancing measures were temporal. Citizens were not allowed to socialize in large groups as before, and they were not allowed to engage in business activities in the market place due to the imposed social distancing rules during the period examined.

The implication of the findings is that social policies can affect the social and economic well-being of citizens. Secondly, the coronavirus outbreak has revealed how a biological crisis can be transformed to a sociological subject. The most important sociological consequences of the coronavirus outbreak for African citizens is the creation of social anxiety among families and households in the region. The outbreak has also shown how vulnerable African societies are in facing health hazards. Policy makers should enforce social policies that unite communities in bad times, to reduce social anxiety.

At the moment, it is impossible to fully know how long the coronavirus crisis will last and how many African citizens will be affected. But what we know is that the number of infected people in Africa is much lower compared to those infected in Europe and the US, and the economic

impact is already severe particularly for oil dependent African countries and for African countries that benefit significantly from the global supply chain. Country specific measures, such as social distancing and lockdowns, have been adopted by many African countries and it is possible that, once the pandemic is over, most African countries will enter into an unavoidable recession.

This paper argue that African governments should use fiscal policies to immediately address the public health emergency. After that, fiscal resources should be used to provide direct support to affected individuals and businesses in order to protect the productive capacity that will be needed to revive the economy of African countries when the coronavirus crisis ends. Other indirect measures to consider is to provide a sustained general safety net for everyone during the pandemic using social and economic policies. There are several ways of doing this, such as providing free electricity to all citizens during the pandemic and making cash transfer payments to all households. Policy makers in African countries need to also think about measures that will reboot the economy after the coronavirus crisis is over such as reducing the price of energy products such as fuel and gas, and provide bailout relief to small and big businesses so that they won't lay-off workers during the crisis and during the recovery process.

Central banks in Africa need to find the right mix of monetary policy tools that will stimulate growth in the economy while the fiscal authorities should do the same using the fiscal tools at their disposal. Social authorities in African countries should ensure that people in local communities have access to effective communication systems so that community members will be able to remotely interact with their family and friends during the crisis, as effective communication is proving to be the most important way to inform citizens about the extent of the spread of the coronavirus and the measures they can take to protect themselves.

In the end, this pandemic will provide an opportunity for each African country to rethink its exposure to the global economy and the spillover implication for each African country. We need to ask ourselves: do the negative effects of globalization outweigh the benefits? Will African countries reduce their trade exposures to countries like China in order to reduce their vulnerability to external shocks in the future? Will African countries like Angola, Libya and Nigeria reduce their dependence on oil revenue in order to reduce their exposure to significant fall in oil price? Will African governments develop existing infrastructure or create new infrastructure, including healthcare infrastructure, that can help in reducing the impact of future crises? Will African countries do a lot more to build up enough foreign exchange reserves in good times so that they will not rely on foreign loans in bad times? These are questions to reflect on! Perhaps, future studies can provide some answers to these questions. Future research can also examine the direct impact of the coronavirus pandemic on the performance of financial institutions in African countries. Future studies can also examine the impact of the coronavirus pandemic on the level of financial inclusion in African countries.

This study has two limitations. The first limitation relates to the sample period. A longer sample period is better because it can yield a much richer result and insight. Secondly, the currency of the data is another issue. It is possible that the currency of the data may be overtaken by future events as the coronavirus continues to spread rapidly on a daily basis.

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Appendix

A1: Africa countries - Coronavirus situation in numbers - May 6, 2020							
Country	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered	Active Cases	Serious, Critical
<u>South Africa</u>	7,572		148		2,746	4,678	36
<u>Egypt</u>	7,201		452		1,730	5,019	
<u>Morocco</u>	5,382	+163	182	+1	1,969	3,231	1
<u>Algeria</u>	4,838		470		2,067	2,301	22
<u>Nigeria</u>	2,950		98		481	2,371	4
<u>Ghana</u>	2,719		18		294	2,407	4
<u>Cameroon</u>	2,104		64		953	1,087	12
<u>Guinea</u>	1,811		10		498	1,303	
<u>Ivory Coast</u>	1,464		18		701	745	
<u>Senegal</u>	1,329		11		470	848	6
<u>Djibouti</u>	1,120		2		745	373	
<u>Tunisia</u>	1,022		43		482	497	17
<u>Somalia</u>	835		38		75	722	2
<u>Democratic republic of congo</u>	797	+92	35	+1	92	670	
<u>Sudan</u>	778		45		70	663	
<u>Niger</u>	763		38		543	182	
<u>Mayotte</u>	739		9		352	378	6
<u>Burkina Faso</u>	688		48		548	92	
<u>Mali</u>	612		32		228	352	
<u>Kenya</u>	535		24		182	329	2
<u>Tanzania</u>	480		16		167	297	7
<u>Guinea-Bissau</u>	475	+62	2	+1	24	449	
<u>Réunion</u>	425	+1			300	125	2
<u>Gabon</u>	397		6		93	298	1
<u>Mauritius</u>	332		10		319	3	3
<u>Equatorial Guinea</u>	315		3		13	299	
<u>Rwanda</u>	261				129	132	
<u>Congo</u>	236		10		26	200	
<u>Sierra Leone</u>	199		11		43	145	
<u>Cabo Verde</u>	186		2		37	147	
<u>Sao Tome and Principe</u>	174		3		4	167	
<u>Liberia</u>	170		20		58	92	
<u>Chad</u>	170		17		43	110	
<u>Ethiopia</u>	162	+17	4		93	65	
<u>Madagascar</u>	151				101	50	1
<u>Zambia</u>	139	+1	4	+1	92	43	1
<u>Togo</u>	128		9		74	45	
<u>Eswatini</u>	119		1		12	106	
<u>Uganda</u>	98				55	43	
<u>Benin</u>	96		2		50	44	

Central African Republic	85				10	75	
<u>Mozambique</u>	81				19	62	
<u>Libya</u>	63		3		24	36	
<u>South Sudan</u>	52					52	
<u>Malawi</u>	41		3		9	29	1
<u>Eritrea</u>	39				30	9	
<u>Angola</u>	36		2		11	23	
<u>Zimbabwe</u>	34		4		5	25	
<u>Botswana</u>	23		1		8	14	
<u>Gambia</u>	17		1		9	7	
<u>Namibia</u>	16				8	8	
<u>Burundi</u>	15		1		7	7	
<u>Seychelles</u>	11				8	3	
<u>Mauritania</u>	8		1		6	1	
<u>Western Sahara</u>	6				5	1	
<u>Comoros</u>	3					3	
Total:	50,502	+336	1,921	+4	17,118	31,463	128