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Africa Current Issues

COVID-19 in Africa: Outcomes and Scenarios

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COVID-19 in Africa: Outcomes and Scenarios

A pandemic has the potential to disproportionately affect Africans. The continent's healthcare sector is underdeveloped. Its infrastructure is insufficient and its borders are porous. Similarly, the economic fallout for the continent is likely to be severe and enduring. This burden will fall heavily on countries with a high dependence on commodity exports to China, weak sovereign balance sheets, high debt burdens, and volatile currencies, among other external fragilities.

In only a few months, rapid spread of the powerful COVID-19 virus rattled global markets and severely hit the world's growth outlook. The shock disrupted production, trade and global supply chains. African economies, which supply vast resources to China's manufacturing sector, face a grim outlook. Several African industries already show signs of financial distress. The early victims are mining and tourism, travel and accommodation. African economies are ill prepared to absorb the financial and economic fallout of the pandemic, especially its longer-term implications for growth.

This pandemic is generating a series of powerful shocks to the world's economic, political, and security structures. Its impacts will lead to heightened fear and uncertainty at multiple levels. To understand the likely impacts (short, medium and long-term) of these shocks on the African continent, it is necessary to unpack outcomes at the first (macroeconomic), second (sectoral) and third levels (political and societal). This article follows the logic in the outline below:

1. **First level** – The macroeconomic impact of COVID-19 on Africa.
    a. Financial markets (equities, bond yields, currencies, commodities).
    b. Trade and consumption (supply and demand side shocks)
    c. The real economy and policy responses (growth, employment, inflation, rates).
2. **Second level** –The sectors that will bear the brunt of the fallout from the shocks
3. **Third level** – Emerging political, societal, behavioural and security issues.
4. **Global level** – The short, medium and longer-term implications of the pandemic.

Background

On the last day of 2019, the World Health Organisation (WHO) was alerted to an outbreak of "pneumonia of unknown cause" in Wuhan city, China. This was quickly identified as a new coronavirus: COVID-19.[1]

Despite extreme measures taken by governments and health professionals to contain its spread, the virus has spread across the globe, infecting more than 1.8 million people and killing over 110,000.[2] Vaccine trials are underway, but there is currently no cure.

While China was ground zero for the COVID-19 outbreak, its impacts on Africa are not limited to the extent of Sino / Africa ties. Its impacts are felt globally. COVID-19's rapid transmission around the world, China's deeply embedded role in global supply chains, and the broader implications of international fiscal and monetary stimulus on Africa are critical elements to understanding the possible scenarios facing the African continent.

To fully appreciate the complex nature of the fallout, it is imperative to understand the transmission mechanisms and the multiple effects of the contagion.

1. The economic impact of COVID-19 on Africa

African countries are highly exposed to movements and events in the global economy. It is in the financial markets that their borrowing costs and currencies are determined and where their commodities are priced based on supply and demand dynamics.

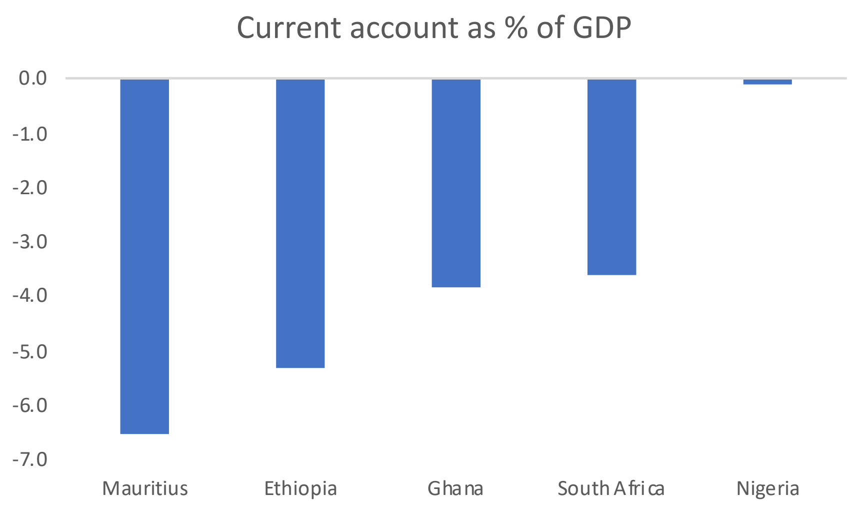
Although the continent has thus far been resilient to the COVID-19 outbreak from a health perspective, the opposite holds true when considering the economic effects. While the financial market impact is almost immediate, the economic consequences are likely to be deeper and last significantly longer. Limited flexibility on the policy front combined with an overarching structural vulnerability to the external environment mean that Africa's economic road ahead is going to be a bumpy one.

a) Financial Markets

African bourses and currencies have been particularly hard hit. African debt yields have rocketed as investors demand a premium to hold the riskier instruments, making the issuing and servicing of debt far more expensive and capital market access difficult, cramping their already limited fiscal space. At the same time, gross government debt across SSA has jumped to nearly 60% of GDP since the GFC, unsustainably ramping up interest payments.[3]

The bulk of African economies are highly dependent on commodity sales (predominantly to China) to generate foreign exchange revenue (oil, gold, coal, iron ore) and are running considerable current account deficits (Figure 1), historically stabilised only by foreign exchange revenue generated through exports. With foreign portfolio flows drying up, and insufficient domestic funds to bridge the shortfall (low import cover ratios), further currency weakness is likely.

Figure 1: Current account balance as percentage of GDP



Source: IMF

The implications are twofold: first, African debt bondholders now demand a premium, thus driving up funding costs. Then, weaker currencies mean that the cost of repaying and servicing debt on bonds issued in foreign currency (euro bonds) rise dramatically.

Rating agencies have been swift to act, with South Africa, Nigeria and Zambia all pushed deeper into sub-investment grade territory, with outlooks remaining negative. Several African countries are already approaching lenders, among them the IMF and World Bank to secure funds to fight the pandemic. While this is unlikely to lead to a balance of payments crisis or sovereign default over the shorter term, especially if transient, it constricts any already constrained fiscal headroom governments may have to shield their economies against the health and economic impact of COVID-19.

b) Trade and consumption

The large developed markets (DMs) vie for political, economic and trade influence on the continent. China is now Africa's biggest trade partner (valued at USD 150 billion) followed by the EU and US.[4] Africa's growth performance is inextricably dependent on Chinese demand and investment. The continent now confronts a scenario of falling export volumes and value, coupled with the potential for a prolonged pause in investment – Africa's immediate economic concern.

Over the longer-term, and more worrying, is that what Africa experienced with China is now occurring with the EU and US as COVID-19 shuts down western markets. This is before factoring in a fall in Africa's output capacity, which is yet to be impacted by quarantines, work stoppages and the general disruption to business. African imports from these markets will reflect falling demand for DM output of finished goods.

Intraregional trade, which accounts for just 17% of African country exports, cannot bridge the gap.[5] This reflects the risk of export concentration. The argument for regional free trade integration remains sound. However, the African Continental Free Trade Agreement (AfCFTA), set to commence mid-2020, will likely be delayed. In addition, the increased likelihood of falling trade volumes, travel restrictions and possible border closures will inhibit regional cooperation, and African countries may turn inward.

On the consumption side too, the outlook continues to deteriorate. Weaker economic activity induces a rise in unemployment levels across almost all sectors, reducing not only import activity but placing downward pressure on demand for locally produced goods. Hardest hit will be consumption of durable and semi-durable goods. Many consumers are likely to adjust their purchasing habits to include only essential items. Arresting the slide will be exceedingly difficult within the limited fiscal space available to most African countries. Looser monetary policy will not represent sufficient intervention.

c) The real economy and policy responses

The global economy was under pressure before the outbreak of COVID-19 as the trade war between the US and China weighed on growth.[6] The outbreak already has economists slashing growth forecasts with some suggesting it may tip the world into recession. The AU expects continental growth to contract by between 0.8% and 1.1% in 2020, 20 million jobs to be lost and an additional USD 130 billion required to fight the pandemic.[7] The global advisory services firm McKinsey has outlined four possible scenarios:

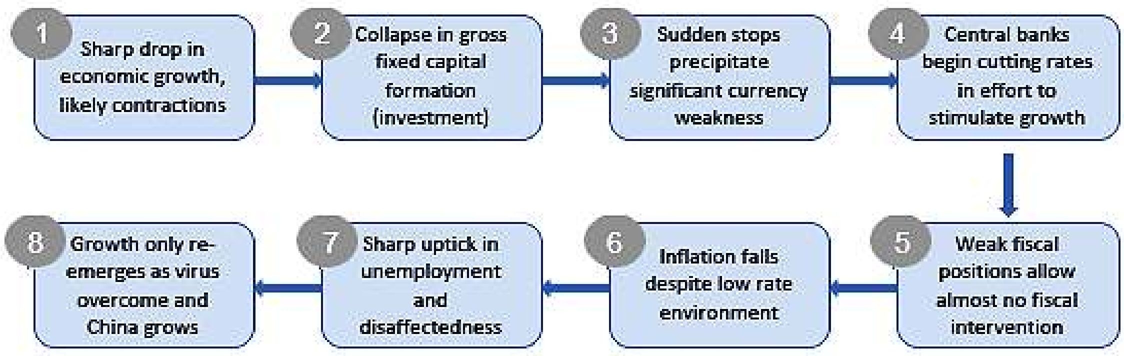
Figure 2: McKinsey's four COVID-19 scenarios for Africa

Source: McKinsey [8]

Any of the four scenarios in Figure 2 will impose heavy costs on African countries. While scenario 1 is less threatening, businesses and governments should work through the likely outcomes and consider responses to all four. For example, restricting the movement of people coupled with both falling global demand and supply could trigger a chain of reactions that suppresses economic growth for some time. How quickly the virus is controlled or eradicated will determine the duration of these effects.

Figure 3 (following) is a logical model of the transmission path for the potential impacts of COVID-19 on economies. Although each phase is distinct, phase changes may skip a phase or even reverse direction. The model conveys the message that navigating the path from the bottom of the emerging recession to a return to growth will be complex and may lead to highly uncertain outcomes.

Figure 3: Phases in the transmission of the COVID-19 impact on economic activity



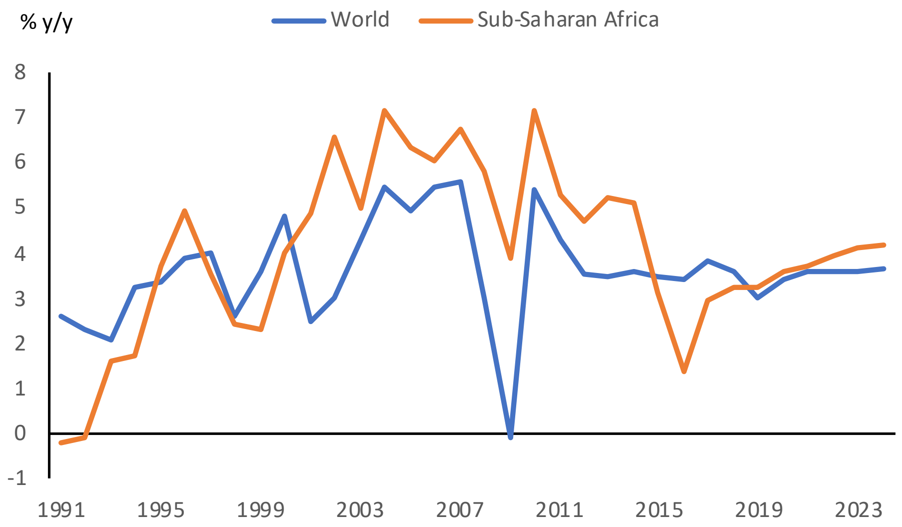
PHASES (refer to Figure 3):

1. Economic growth decelerates sharply, likely contracting as export demand and fiscal revenue face shocks.
2. Domestic companies and foreign capital halt investment, exacerbating growth slowdown.
3. Financial markets and currencies weaken significantly due to sudden stops that inhibit current account funding – current accounts narrow over time as import demand falls.
4. Central banks begin a rate cutting cycle, and while they have greater rate room than developed markets (DMs), temper their response to guard against sharper currency sell-offs.
5. Rates cuts are insufficient to stimulate growth. Given high debt burdens in emerging markets (EMs), high financing costs and falling tax revenue, little if any fiscal stimulus is realized.
6. Inflation falls despite rate cuts due to dramatic reductions in household and business consumption.
7. Low demand, low profits and low growth lead to dramatic increases in unemployment and reductions in tax revenue.
8. Growth re-emerges once COVID-19's spread is halted, or eradicated altogether and China and DMs begin to grow – rebound will be subdued due to the heavy debt burden.

Source: Author

Sub-Saharan Africa weathered the GFC relatively well, avoiding an outright recession and going on to outpace global growth (Figure 4). The "resilience" was largely supported by unprecedented quantitative easing and record low rates in DMs, which forced investors into higher yielding, riskier assets in growth markets like Africa. This tailwind, however, may not be available this time around.

Figure 4: Global GDP growth vs. Sub-Saharan Africa



Source: IMF

The key difference in policy response between the previous financial shock (GFC) and the current (COVID-19), is that at the time of the GFC, DMs were able to pull both monetary and fiscal levers. World growth was high and commodity prices were elevated for an extended period, providing both capital and rate buffers. These buffers were drawn down to varying degrees in the decade-long recovery. In today's COVID-19 case, EMs have some capacity to lower rates, but little capacity to provide fiscal stimulus, while the opposite applies in DMs.

Most African countries have narrow tax bases, weak tax collection mechanisms, and a heavy reliance on commodity revenues. These sources are likely to come under significant pressure, placing further strain on thin financial resources. With most African countries running fiscal deficits, their policy flexibility is limited to cutting interest rates, at best a modest intervention. Few if any African countries have enough fiscal space to counter the slowdown that threatens to impact nearly every sector. Unfortunately, Africa can no longer rely on Chinese benevolence and investment, as the Chinese economy is rapidly decelerating and turning more inward.

Nigeria and South Africa — two of Africa's biggest economies that generate half of its GDP — now register near-zero growth. This greatly increases the likelihood that fixed investment growth on the continent will grind to a halt, leading to rising unemployment and widespread social disaffectedness.

2. Which sectors in Africa will bear the brunt of COVID-19's impact?

Since the financial and economic impact of COVID-19 is set to rattle both the supply and demand side for goods and services, there appear few, if any, places to hide. The resulting shocks will be broad-based.

Many African economies will see an increase in the unemployment rate, due to demand side disruptions for commodity-orientated African and EM exports to China. Manufacturing and services companies supplying commodity producers will come under pressure to reduce services or fees. Many will be forced to leverage output efficiencies through reduced hours, headcounts, or wages. The major African industry sectors are expected to be impacted in the following ways:

Mining and minerals

For Africa, mining is one of the most exposed sectors across almost all minerals. Iron ore (South Africa), copper (Zambia) and oil (Nigeria, Angola, Ghana) are hardest hit, both in terms of demand and price. Commodity disruptions are likely to take time to unwind, as once capacity levels normalise with demand, inventories of raw materials will need to be run down.[9]

Aviation, tourism and hospitality

The travel and tourism industry will also be particularly hard-hit. Visitor volumes, not just from China, but from other destinations, will continue to plummet. Suppliers to this value chain — booking agents, venue owners, tour operators, hotels and real estate — will suffer.

Flights within the continent and from external destinations were effectively halted in efforts to contain the spread of the virus.[10] Ethiopian Airlines, easily the continent's most successful carrier, started retrenching and furloughing (three month leave without pay) thousands of its workers., The International Air Transport Association (IATA), tentatively estimated that the financial cost to African airlines could amount to USD 40 million.[11] Industry figures are much worse. Ethiopian Airlines has already lost USD 550 million. African airlines are collectively USD 4.2 billion down, and the international aviation industry is USD 52 billion in the red.[12] Many state-owned airlines are already in dire financial straits. This shock could threaten their continued existence. State-owned South African Airways and SA Express are grounded. The government terminated all commercial flights, and both carriers face possible liquidation.

In addition, many business travellers and tourists have been forced to cancel or at best postpone their travel plans, impacting accommodation and tourist bookings. Numerous African and international conferences were abandoned.[13] Conference hubs in Morocco, South Africa, Kenya and Mauritius depend heavily on events to generate income for small and medium sized enterprises. Collectively, these events generate billions of dollars, not just for event hosts, but for accommodation and catering providers, tour outfits and the travel industry. Those countries that rely heavily on tourism income - such as South Africa, Mauritius, Madagascar, Kenya, Tanzania and the Seychelles - will be hit the hardest.[14]

Retail and financial services

For Africa in particular, retail and financial services are important drivers of economic growth, and small and medium sized enterprises are significant employers. The demand shock and resulting negative impact on growth will be acute in the retail and financial services sector.

For nearly all households, consumption will be reduced to the essentials, leading to large scale margin compression for retailers. They will in turn put pressure on landlords to choose between reducing rental charges or face rising vacancy rates.

For financial service providers, the impact of higher unemployment, weak corporate activity and lower economic growth will result in tighter credit markets, rising defaults and a drop in endowment income.

Figure 5: African Sectoral assessment

	Medium-term African sectoral impacts				
	Mining	**Manufacturing**	**Travel and tourism**	**Retail**	**Financial services**
Sudden stops	Lower commodity prices and production. Sharply lower revenue, staff reductions	Cheaper input costs, but no market to sell to	Airline cashflow constraints (fall on sovereign), drop in occupancy rates and tourist receipts	Impact of lower tourist volumes. Domestic focus on essentials only. Margins compressed	Higher funding costs, tighter credit markets, investment outflows
Exchange rate	Depreciating currency not enough to offset fall in commodity price and rising input costs	Lower input cost (raw materials) not enough to make up for demand side pressure	Weak exchange rates should boost travel and tourism but travel restrictions curb any upside	Significantly higher import costs. Insufficient capacity for import substitution	Pressure on foreign currency corporate bond issuance, higher debt repayment cost
Inflation	Input costs rise while revenue falls leading to corporate losses	Inability to pass on increased price of imported components to end customer	Insufficient tourist volumes to benefit from lower inflation	Should rise, but demand too weak for pass-through	Drop in inflation provides no advantage as fall in rates keeps yield differential steady
Interest rates	Lower rates assist debt service, but revenue pressure raises risk of default	Falling rates to provide mild upside to non-durable producers	Lower rates and inflation not enough to stimulate domestic travel in absence of foreign tourists	Mild rate relief for non-durable retailers. Worsening outlook for durable and non-durable sales	Interest rate cut reduces endowment income, but offsets some of the increase in defaults, NPLs
Growth	Sharp drop in economic activity, exports, FX income and profits	Manufacturers for export particularly hard hit, some respite for food manufacturers	Large drop in flights, tourist income, negative impact on small/medium size businesses	Household consumption likely to contract, inability to pass on cost increase, margin compression	Tighter credit market, rising defaults

Figure 5 summarizes the likely economic impacts, and Africa is no stranger to the sociological and political third round effects that emerge from periods of economic instability and uncertainty. The following section maps these and the relevant environmental and security issues.

3. Geopolitical, societal, environmental and security issues stemming from the pandemic

Geopolitical

China is likely to face political backlash once the COVID-19 dust settles, with many countries, most notably the US and UK, already having accused it of covering up the extent of their death rate and raising the alarm too late. The ambitions of its Belt and Road initiative are likely to be severely curtailed, not just by political retaliation, but also by lower global trade and foreign investment volumes. In such an instance, China would look inward to drive growth by raising domestic consumption and investment levels at the expense of foreign investment, leaving Africa particularly vulnerable.

On the African front, trading under AfCFTA is likely to be delayed at best, as border closures wreak havoc on the flow of goods. Of great concern is that under the agreement, countries will not receive a tax windfall from imports and exports at a time when EM government finances are under severe strain. Any friction between signatories to the agreement resulting from this issue could jeopardise the entire continent's free trade project.

Societal

Incidents of xenophobia, and sinophobia in particular are on the increase, and are likely to leave a lasting impact on tourism both to and from China.[15] Not only this, but Chinese goods could face similar discrimination, as buyers (justifiably or not) fear lingering coronavirus contamination.[16]

Patterns of interaction among people may undergo radical shifts, as connections shift from the real to the virtual world. This will be true not only for our work life, but for our personal lives.

Environmental

If there is any upside to the COVID-19 crisis, it is for the environment. Recent atmospheric readings show a dramatic fall in CO_2 emissions, and a break from the relentless march of industrialisation and deforestation by way of lockdown provides a reprieve for several species from hunting, poaching and the destruction of their habitats.

As a result of the outbreak, Chinese authorities banned the trade, sale and consumption of wildlife, an important step in saving several species from extinction. On a cautionary note, however, vilification and hunting of perceived virus carrying species must be avoided.

Security

Governments, police and security forces will have to remain vigilant, stamping out any violence and intimidation of foreign nationals as a result of rising xenophobia and nationalism. It is important to expedite the legal processes to punish and discourage such behaviour.[17]

Further, the military has been deployed in some countries to assist with the enforcement of lockdown restrictions. These forces are not sufficiently trained for maintaining public safety, and incidents of violence, intimidation and aggression against the media and citizenry are on the rise.[18] A worsening of the crisis from a health, economic and resources perspective could see civic mobilisation, revolt and a rise in violent standoffs.

While trade under the African Continental Free Trade Agreement (AfCFTA) has yet to commence, any border closures, dramatic falls in trade volumes or flare ups in xenophobia could push out free trade ambitions and curtail the acceleration of African growth over the medium term.

China closed its internal borders to prevent the spread of COVID-19. Doing this in Africa would pose extensive challenges, given the continent's poorly policed and enforced movement. This approach also has the potential to generate social unrest unless carefully managed.

One asset the African continent has is prior experience in dealing with viral outbreaks and contagion (Ebola, measles, cholera, Lassa as well as malaria). It also has a disproportionately large youth population (60% of the population is below the age of 25).[19] Early indications suggest that the severity of COVID-19 is lower for young patients, and that mortality rates are significantly lower for younger populations. This should alleviate some of the burden on already thin medical response capabilities.

4. The short, medium and longer-term implications of the COVID-19 outbreak

In the short term, a great deal depends on the ability to contain the virus, or at least the time it takes to run its course. It is likely that medical and healthcare systems across the globe will remain under immense strain to treat COVID-19 patients. The public healthcare systems of the region will require more financial resources. This will require raising debt or realigning budgets. Both would increase pressures on public finances and service delivery.

5. Conclusions

COVID-19 arrived when global economic growth was already under threat. The emerging pandemic will have severe consequences for health, especially for fragile African economies. The resulting shocks will lead to higher debt levels, bad loans, business closures, and the loss of many jobs in Africa. It may take several years for the continent to recover from the ensuing recession.

The wider and longer-term geo-political consequences of these shocks are far from certain. The many inherent uncertainties and complexities will lead to unforeseen consequences. These raise challenging questions regarding leadership:

- Many African leaders are of an age that may increase their susceptibility to COVID-19. Might a political and leadership shake-up be the making in certain countries?
- Can and will COVID-19 be used as an opportunity for incumbents to push out national elections scheduled for 2020 in an attempt to extend their rule?
- Will COVID-19 see a realignment in global geopolitical relations, with African countries relying less on China for trade and financial support as they have over the past decade?

Strategically and tactically, Africa is relatively ill equipped and ill prepared to deal with COVID-19. The emerging reality is that even if COVID-19 does not directly trigger a humanitarian crisis in parts of the continent, an ensuing global economic crisis might well do so.

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References

[1] Gardner, L. (2020, January 23). Mapping 2019-nCoV. Retrieved from John Hopkins University: https://systems.jhu.edu/research/public-health/ncov/

[2] Sky News. (2020, February 27). Coronavirus: Japan confirms first case of person being reinfected with COVID-19. Retrieved from Sky News: https://news.sky.com/story/coronavirus-japan-confirms-first-case-of-person-being-reinfected-with-covid-19-11944295

[3] Olander, Eric. Coronovirus: Africa braces for the economic impact of China slump. *Africa Report.* [Online] February 28, 2020. https://www.theafricareport.com/23971/coronovirus-africa-braces-for-the-economic-impact-of-china-slump/?utm_source=twitter.com&utm_campaign=post_articles_twitter_28_02_2020&utm_medium=social

[4] Smith, Elliot. The US-China trade rivalry is underway in Africa, and Washington is playing catch-up. *CNBC.* [Online] October 9, 2019. https://www.cnbc.com/2019/10/09/the-us-china-trade-rivalry-is-underway-in-africa.html

[5] Gandhi, Dhruv. Increasing intra-regional trade in Africa. *Brookings Institute.* [Online] February 22, 2019. https://www.brookings.edu/blog/africa-in-focus/2019/02/22/figures-of-the-week-increasing-intra-regional-trade-in-africa/

[6] Olander, Eric. Coronovirus: Africa braces for the economic impact of China slump. *Africa Report.* [Online] February 28, 2020. https://www.theafricareport.com/23971/coronovirus-africa-braces-for-the-economic-impact-of-china-slump/?utm_source=twitter.com&utm_campaign=post_articles_twitter_28_02_2020&utm_medium=social

[7] Frankel, Jeffrey. Will coronavirus trigger a global recession? *The Guardian.* [Online] February 26, 2020. https://www.theguardian.com/business/2020/feb/26/will-coronavirus-trigger-global-recession-donald-trump-trade-policy

[8] Source: https://www.mckinsey.com/featured-insights/middle-east-and-africa/tackling-covid-19-in-africa

[9] Chow, Emily. China commodities nosedive as coronavirus raise consumption fears. *Reuters.* [Online] February 3, 2020. https://www.reuters.com/article/us-china-commodities/china-commodities-nosedive-as-coronavirus-raise-consumption-fears-idUSKBN1ZX0Q9

[10] Pallini, Thomas. At least 73 airlines have canceled flights to China amid coronavirus fears. *Business Insider.* [Online] February 6, 2020. https://www.businessinsider.com/airlines-canceling-changing-flights-to-china-amid-coronavirus-fears-2020-1?IR=T#eastar-jet-25

[11] Endeshaw, Dawit. African airlines face $40 mln hit in 2020 from coronavirus. *Reuters.* [Online] March 4, 2020. https://af.reuters.com/article/topNews/idAFKBN20R1UD-OZATP

[12] Getachew, Addis. COVID-19: Ethiopian Airlines reports $550M revenue loss. *AA.* [Online] March 7, 2020. https://www.aa.com.tr/en/africa/covid-19-ethiopian-airlines-reports-550m-revenue-loss/1796260

[13] Zetlin, Minda. 6 Major Conferences and Events That Have Been Canceled Because of the Coronavirus. *Inc.* [Online] February 2020. https://www.inc.com/minda-zetlin/coronavirus-fears-cause-cancellation-of-6-major-conferences-events-so-far.html

[14] 20% of Seychelles GDP comes from tourism revenue (40)

[15] Haan, Jarryd de. Indonesia Already Feeling Economic and Social Impacts of the Coronavirus. *Future Directions.* [Online] February 15, 2020. http://www.futuredirections.org.au/publication/indonesia-already-feeling-economic-and-social-impacts-of-the-coronavirus/

[16] Saplakoglu, Yasemin. How long can the new coronavirus last on surfaces? [Online] February 16, 2020. https://www.livescience.com/how-long-coronavirus-last-surfaces.html

[17] Kagina, Ben. DR Congo's Ebola crisis has led to children dying from measles. *Quartz.* [Online] July 12, 2019. https://qz.com/africa/1665055/dr-congos-ebola-crisis-has-led-to-children-dying-from-measles/

[18] Etheridge, Jenna. Coronavirus outbreak: Chinese ambassador advises SA nationals to stay in China, rather than return home. *News 24.* [Online] February 14, 2020. https://www.news24.com/SouthAfrica/News/coronavirus-outbreak-chinese-ambassador-advises-sa-nationals-to-stay-in-china-rather-than-return-home-20200214

[19] Drews, Fred. Charts of the Week: Africa's changing demographics. *Brookings Institute.* [Online] January 18, 2019. https://www.brookings.edu/blog/brookings-now/2019/01/18/charts-of-the-week-africas-changing-demographics/

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