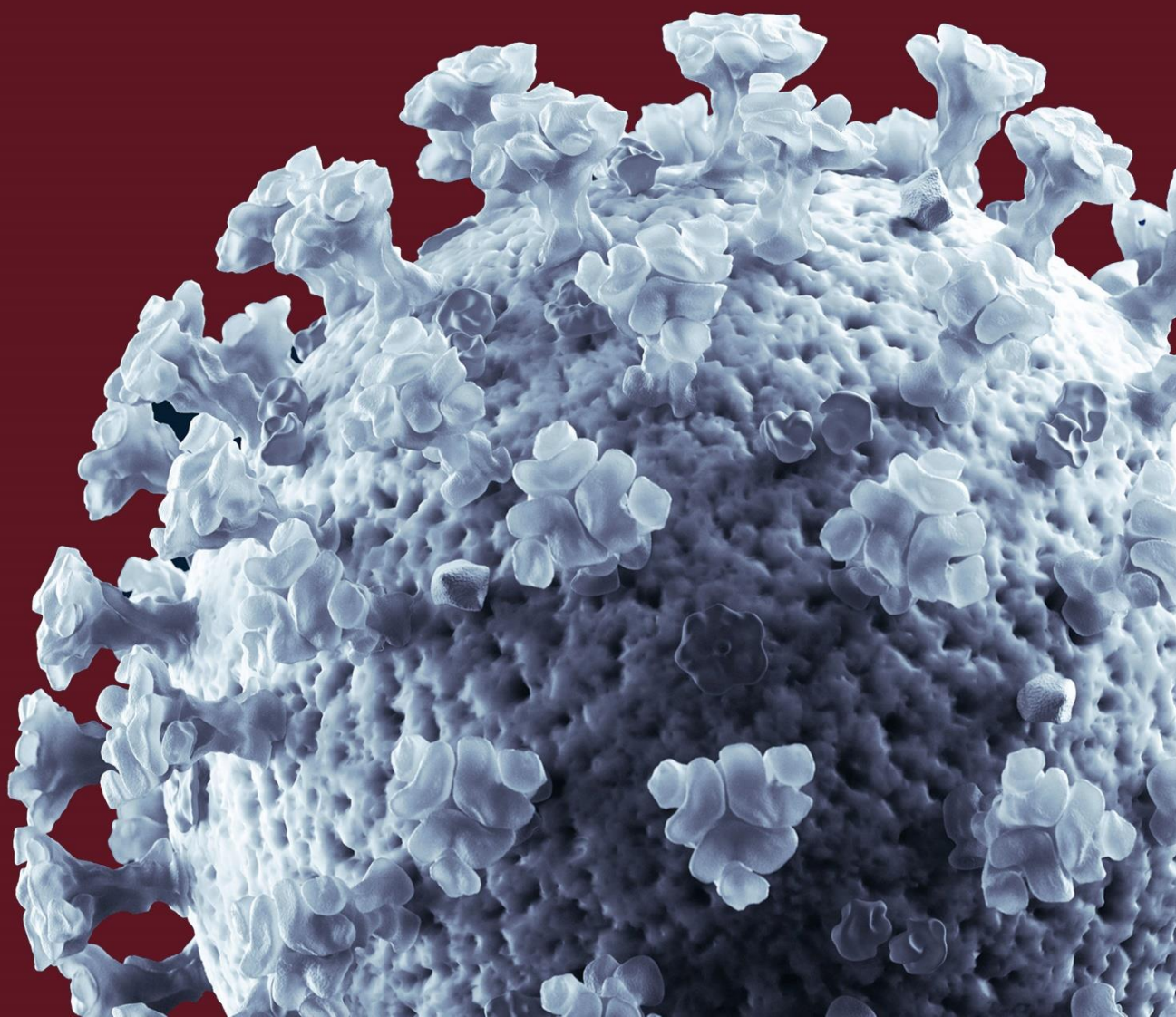


Coronavirus COVID-19: Trading economic growth in favour of public health

March 13th 2020



Executive Summary

- **What is Coronavirus?** According to the World Health Organization (WHO), the coronavirus is a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). A novel coronavirus is a new strain that has not been previously identified in humans. The most recently discovered coronavirus causes coronavirus disease COVID-19.

The virus was first reported in Wuhan, China, in December 2019 and on March 11th 2020, WHO recently declared COVID-19 a pandemic (a disease epidemic that has spread across a large region).
- **Governments are more aggressive in their fight against the virus:** Majority of the previous pandemics in the 20th and 21st Century have been different strains of influenza. The current virus is a mutation of the Spanish flu. Some of the measures taken by governments to contain previous outbreaks were less than have been taken by most countries to combat the spread of COVID-19.
- **Global economic growth to decline:** The global economy had been projected to experience a sluggish recovery, however, this is likely to be revised downwards. Travel restrictions will see inhibitions to the movement of capital and labour and small and micro enterprises will bear the full weight of supply chain disruptions and subdued consumer demand.
- **Impact on the Kenyan economy:** Output contractions in China may result in a reduced import bill, in addition to our export volumes shrinking as a result of subdued global demand. The Kenyan economy is likely to experience slower growth as a result of sectors such as manufacturing, hospitality and tourism being adversely affected by second-order effects of the virus.
- **The Kenyan government response is crucial in the mitigation effort:** As is the case in countries that have been able to contain the spread of the virus, the Kenyan government needs to enact solutions that (i) create awareness and promote accurate dissemination of information, (ii) enforce self-quarantine measures, (iii) limit exposure of Kenya's citizens to the virus by banning public gatherings, (iv) closing learning institutions, and (iv) postponing sporting events. Enforcement of Countywide lockdowns could be effective in containment but detrimental to economic growth.

The global outbreak of coronavirus has deepened as confirmed cases increase and world leaders take action to limit the spread of the virus. The latest country to report its first case is Kenya.

Previous outbreaks of diseases in the 20th and 21st centuries

Most of the previous pandemics in the 20th and 21st Century have been different strains of influenza. The diseases were mostly a result of the evolution of the virus; from Spanish flu to Asian flu to Hong Kong flu to Swine flu.

None of the actions taken by governments to contain previous outbreaks matches the actions that have been taken by most countries to combat the spread of COVID-19. Previous actions were milder and are likely to have had less impact on the global economy than the impact COVID-19 may have on global growth.

Name	Year	Number of infections	Number of deaths	Number of countries affected	Action taken by countries	Impact on economies	First reported case	Duration
Asian flu	1957		About 2 Million		Closure of school, Closure of factories, Closure of mines, Closure of offices	Setback in the production of goods	China	1957-1958
Swine flu	2009		575,000	74	Controls over immigration	Economic losses ranged from 0.5% to 1.5% of GDP in affected countries	U.S.A	2009-2010
Spanish flu	1918		About 30 Million		Large cities such as New York and Philadelphia were shutdown.	Labour shortages, Wage increases Economic loss estimated at 4.8% of GDP	U.S.A, New York.	1918-1920
Hong Kong flu	1968	250 Million to 1 Billion	Between 1 to 4 Million			Economic loss estimated at 3.1% of GDP Loss of productivity, Reduced work performance	China	1968-1970
SARS	2002	8098	774			Caused a socio-political crisis especially in China	China	2002-2004
Encephelas lethargica (sleeping sickness)	1915	50000000					Vienna	1915-1926
MERS	2012	2229	791	27			Saudi Arabia	2012-2018
Ebola	2013	26616	11323	6	Impositions of travel bans	Reduced tourism, Decreased mining, High unemployment, High fiscal impact, Fewer investors, Decreased agricultural production.	Guinea	2013-2016

Why the concern over the virus?

The virus has similar symptoms to that of a flu or an allergy. The only way to confirm that someone has COVID-19 is through a swab test.

	CORONAVIRUS	COLD	FLU
Sore throat	Sometimes	Common	Common
Cough	Common	Common	Common
Sneezing	-	Common	Sometimes
Fever	Common	-	Common
Body aches	Sometimes	Mild	Common
Tiredness	Sometimes	Mild	Common
Headache	-	-	Common
Runny/stuffy nose	-	Common	Sometimes
Nausea	-	-	Sometimes
Shortness of breath	In Severe cases	-	-

The reasons we are concerned about the virus are related to its health and economic impacts. These include:

- **Mortality rate:** According to WHO, the death rate of COVID-19 currently stands at 3.4% which is higher than that of the seasonal flu, which kills about 0.1% of those infected.
- **There is currently no vaccine:** The vaccine is currently in the testing phase and it takes several months before it can be released to the public. Historically, due to the long testing period, most vaccines are usually released after the viruses have been contained.
- **The virus is highly contagious:** Coronaviruses spread from person to person through droplets released when people who are infected cough or sneeze. These infected droplets can land on people nearby, who can then become infected if the virus gets into their body through their eyes, nose or mouth.
- **Globalization:** Ease of travel makes it very easy for people to spread the virus
- **Supply-side shocks:** Some countries have shut down cities and businesses. This is likely to reduce the supply of goods. Over the years, supply chains have become globally linked as producers source goods from other countries and also outsource manufacturing. The reduced production and shutdown of the ports in China will reduce global production. Global economic growth is also likely to decrease.
- **Demand-side shocks:** The lock-downs and quarantines are likely to reduce the demand for goods and services. As people panic (due to fear of shortage of goods) there is likely to be a short-term spike in demand, only for consumer staples. Demand is likely to decrease as people put off investment and consumer confidence reduces.
- **Low commodity prices:** Lower demand as global growth slows is likely to lead to a decrease in commodity prices. This is expected to negatively affect the economies of commodity-exporting countries. Kenya, for example, might benefit from a decline in global oil prices but could also suffer from a decrease in its exports (tea, coffee, and horticulture)
- **Contagion:** Lower demand in one sector is likely to reduce demand and earnings in other sectors and could negatively affect the economy. For example: In the US, as oil prices fall coz of demand, highly leverage firm will struggle, which is likely to affect the banks and finally the whole economy. On average US banks exposure to the energy sector ranges between 7%-15% of their capital.

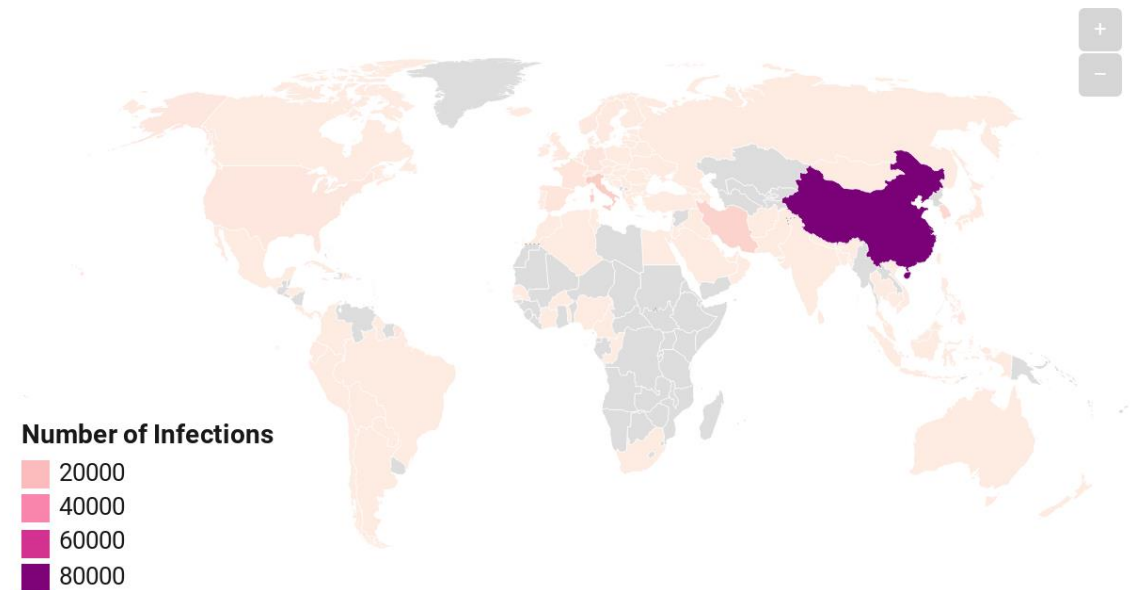
Apart from the economic and health reasons, the virus has also become a reason for concern because of:

- **Social Media:** Information and misinformation is spreading very fast on social media which can lead to panic.
- **Widespread global infection:** It has rapidly spread across the globe and infections are increasing on a daily basis. Government officials and celebrities have been infected thereby removing the illusion that some people are safer than others.

COVID-19 Infections

COVID-19 is affecting 136 countries and territories around the world and there are currently over 142,000 confirmed cases.

COVID-19 Infections



Source: WHO, Time, Datawrapper

Global Response

Different countries have chosen to respond to the situation in different ways. So far, the number of infections and measures taken are as follows:

Country	Total cases	Total deaths	Measures taken
China	80,814	3,177	<p>Locked down on hotspots (Wuhan and elsewhere in Hubei province).</p> <p>Forbidding residents from leaving their apartments without permission</p> <p>China built a hospital in 10 days.</p> <p>14 day Self-quarantining measures for residents returning from Lunar New year celebrations.</p> <p>Spraying disinfectant solution in Wuhan.</p> <p>Policy rate cuts by Chinese Monetary authorities.</p>

Country	Total cases	Total deaths	Measures taken
Italy	15,113	1,016	<p>Italy has imposed unprecedented travel restrictions on its 60 million people.</p> <p>Also all schools and universities have been closed and all sporting events are also being suspended for the coming month.</p> <p>Closure of all non-essential shops leaving only supermarkets and pharmacies open.</p> <p>Adoption of social distancing measures.</p> <p>Implementation of debt holidays by Italy's banking sector.</p>
Iran	10,075	429	<p>The authorities have tried to limit the spread of Covid-19 by closing schools, cancelled public gatherings, and urging people not to travel.</p> <p>Iran is limiting travel between its major cities.</p> <p>Citizens have been urged to reduce the use of paper banknotes.</p> <p>Daily disinfection of public transport means.</p>
South Korea	7,979	67	<p>Set up medical drive through screening clinics.</p> <p>Subsidized SMEs so they can provide flexible work hours to employees who have children home from school.</p>
Spain	3,146	86	<p>Spain has initially been criticized for not acting faster to contain the virus.</p> <p>It has now closed schools in some parts of the country and stopped all flights arriving from Italy.</p> <p>Suspended plenary meetings of parliament</p> <p>Ban public events with more than 1,000 people.</p> <p>Large-scale sport events to take place behind closed doors.</p>
France	2,876	61	<p>Nationwide ban on gatherings of more than 1,000 people.</p> <p>Sporting activities postponed (Paris Marathon has been postponed to October).</p> <p>Advised citizens nationwide against visiting older people, to avoid spreading the disease to those most vulnerable.</p> <p>Closed schools in certain zones.</p>
Germany	2,745	6	<p>Cancelling events that draw more than 1,000 people.</p> <p>The city of Berlin has called off performances at all opera houses, state theatres and concert halls.</p> <p>A number of matches will take place with no fans in attendance.</p>

Country	Total cases	Total deaths	Measures taken
USA	1,762	41	<p>Thousands of employees were told to work from home.</p> <p>Suspends travel from Europe to US</p> <p>Public school districts in several states have shut down, universities are moving classes to online only, and even churches are limiting services or prayer meetings.</p> <p>Also there have set a containment area of about three square miles around the city of New Rochelle.</p> <p>Passing of an \$8 Billion package to tackle the disease and support research and tracking.</p>
Japan	700	19	<p>Closure and clamping down on schools and public events.</p> <p>Entry ban on foreigners who travelled to Hubei and Zhejiang provinces in China.</p> <p>Symptom-showing travellers asked to wear face masks.</p> <p>Cancellation of Visas for travellers from highlighted countries.</p> <p>Adoption of a 1 trillion Yen package to support the economy and Small businesses.</p>
United Kingdom	590	10	<p>Publication of a Coronavirus Action Plan outlining three phases' i.e. containment, delay, and mitigation.</p> <p>Containment phase: Monitoring and Isolation of suspected cases. Treatment of confirmed cases and contact tracing.</p> <p>Sporting events being played behind closed doors.</p>

Impact on global growth

Global growth projections are likely to be revised downwards. The impact of the pandemic is likely to depend on the degree of the epidemic. According to a 2013 World Bank Report¹, a mild case (as in the 1968 flu pandemic, cost of 0.7% of GDP), a moderate case (as in the 1958 flu pandemic, cost of 3.1% of GDP), and a severe case (as in the case of the 1918 pandemic, cost of 4.8% of GDP).

The World Bank and the IMF had previously projected that the global economy will grow at 2.5% and 3.3% respectively. Following the outbreak, they are likely to revise their figures downwards. Revised figures from OECD forecast that global growth will slow to 2.4% in 2020

	2020	Post-COVID-19
OECD	2.9%	2.40%
World Bank	2.5%	
IMF	3.3%	

The global economy is likely to suffer as a result of the virus and the various actions taken by the governments:

- **Travel restrictions to affect the aviation and hospitality industries:** Coronavirus fears have caused countries to adjust their immigration policies to restrict non-essential and in some cases essential travel across certain countries. At the onset of the outbreak, non-essential travel bans were imposed on China and Iran. Currently, countries with notable travel bans and restrictions include the United States (30-day travel restriction on the EU) Czech Republic, Argentina, India, Singapore, Austria, Croatia, Hong Kong, Italy, Malaysia and Turkey.

Several sectors likely to be affected include the hospitality, tourism and transport sector. Travel restrictions could potentially slow down the mobility of labour across economies and are likely to contribute to output and productivity contractions. Similarly, some firms in the aviation industry have taken to requesting staff to voluntary take unpaid leave and laying-off others.

On the other hand, travel restrictions may moderately reduce case importation from one country to another, however, early detection and creation of awareness would serve as better policies to be implemented.

- **Reduced economic activity to greatly affect small business owners:** Countries worst afflicted by the coronavirus are currently trading economic growth in favour of protecting citizens. For instance, Italy is currently permitting the operation of only pharmacies and retail in the wake of the outbreak. Small businesses are very likely to experience the full brunt of supply chain disruptions, see lower customer traffic and be affected by international pricings.

The retail and hospitality sector in these countries will be affected as individuals stay away from shops and restaurants due to imposition of self-quarantine measures. The other impact may be tighter liquidity due to business owners experiencing subdued demand and tighter supply chains. Small businesses are also likely to default on payments and are likely to have a difficult recovery given that their balance sheets are not robust enough to withstand a slowdown. Small business owners may have to shut down storefront operations in favour of protecting themselves and their employees.

- **Production reduces as major cities and provinces shut down:** The outbreak has prompted the shutdown of several major cities (Wuhan) and a country (Italy). The effect of city and state-wide lockdowns greatly reduces the output of these regions. It limits business activity and the ability of economic agents in these zones to earn incomes.

Closure of Wuhan, the centre of China's automobile sector led to company's like Hyundai and other car manufacturers ceasing productions. Other firms affected by the closure of Wuhan and other major industrial cities in China include Apple Inc. who projected a drop in revenues owing to their global supply chain notably for semi-conductors and chipsets being interrupted.

- **Cancellation of Major sporting events:** The Outbreak has been of notable concern to sports globally with looming concerns over the cancellation of the Tokyo Olympics. The host country Japan has been one of the more affected countries and there is a likelihood the event may be cancelled. Japan might not make a return on the investments made in the development of facilities for hosting of the games. Other sporting events that have been postponed are UEFA, and NBA, the National Hockey League and the National football league in US have been suspended.

The effect is likely to hit sports teams majorly as their major revenue sources are match day revenues, broadcasting rights and commercial revenues. Demand for Sports branded goods, ticket sales and possible sponsorships will decline and as such revenues will decline. Small businesses in the world of sports will also fall victim to the cancellation of these events.

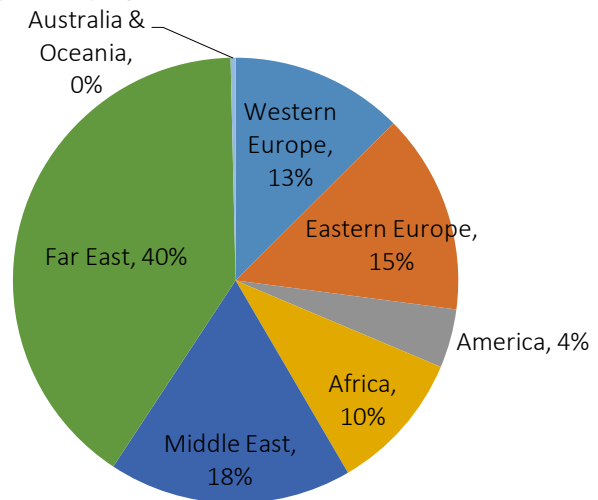
- **Oversupply depresses global oil prices:** Following the outbreak of the virus in China, global oil demand has declined with manufacturing in China grinding to a halt. Subdued oil demand has led to a decline in global oil prices. A factor that has been exacerbated by an increase in oil supply from Saudi Arabia following a failure to agree on terms with OPEC+ on further supply cuts. Subdued oil demand is likely to impact US shale producers due to the high leverage in their books. A key risk is that these leveraged firms may be unable to generate a substantial return at the prevailing market price of oil. Locally, lower oil prices may be beneficial in stimulating demand as lower oil prices would likely result in price reductions of commodities.

Impact of COVID-19 in Kenya

➤ Kenya's import bill to decline as global production declines

In the year ending 2018, the import of goods and services as a percentage of GDP was 23.01%. About 58% of imports to Kenya come from the Middle East and the Far East. With these countries affected by the virus, the volume of imports is likely to reduce significantly.

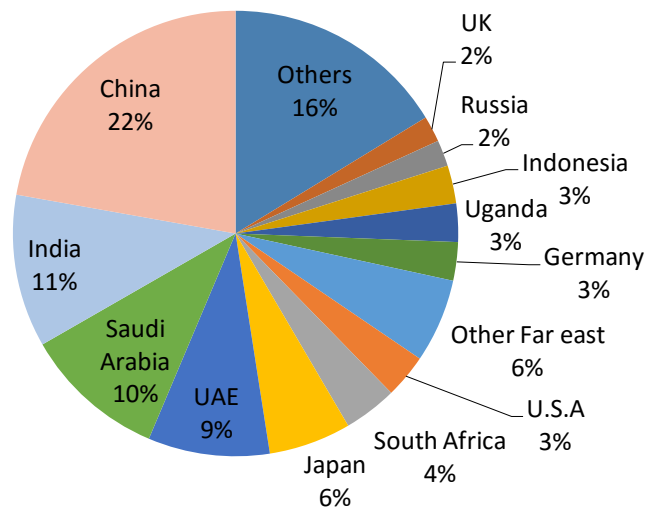
Chart 1: Imports compilation by regions as at 2018



Oil prices have declined leading to a low import bill which is effectively good for our economy. However, China has reduced production of goods which has negative effects on our economy which relies on some of these goods as raw materials and intermediate goods used in production.

Close to 40% of Kenya's imports come from China, India and Japan. With COVID-19 affecting most of these countries, they have put in measures to reduce the infection rate. For instance, China has shut down some of its ports hence no exportation of goods, India has also imposed export restrictions on pharmaceutical goods in a bid to prepare adequately for the effects of the virus.

Chart 2: Imports compilation by country as at 2018

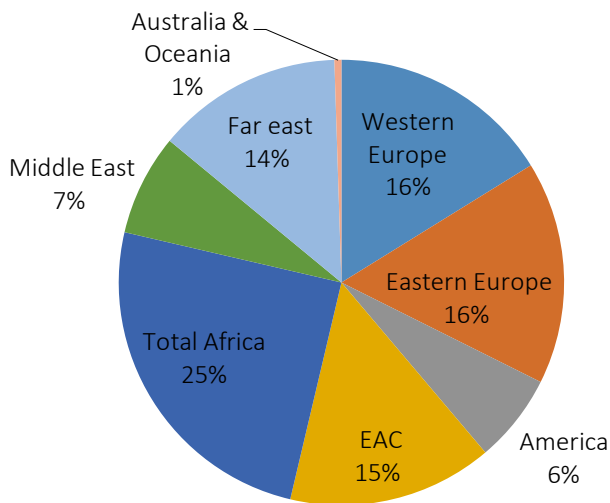


➤ **Lower exports earnings to decrease**

In the year ending 2018, the export of goods and services as a percentage of GDP was 13.18%. However, this is likely to fall, as with the continued spread of the COVID-19 virus demand for exports will reduce.

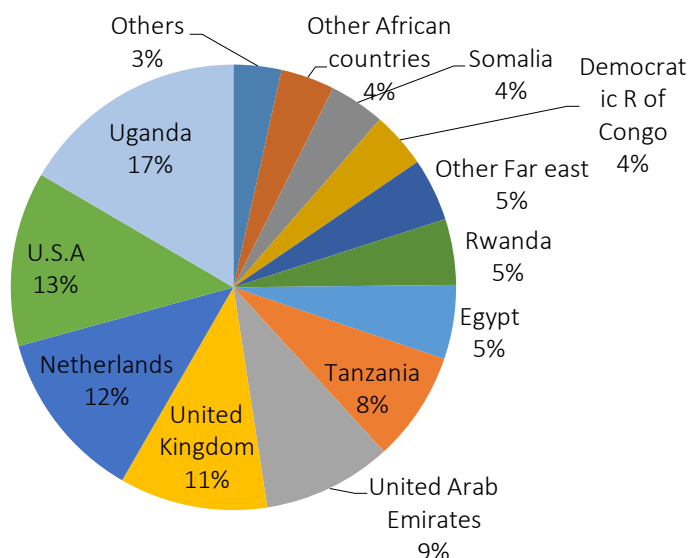
About 37% of Kenya’s exports go to Western Europe, Far East and Middle East which have been affected by the virus hence demand for exports is likely to decrease. About 6% of our exports are to America, which has been seen to impose restrictions on their key trading partners. An imposition of any trade restrictions on Kenya by America following the recent COVID-19 case will have negative effects on the economy.

Chart 1: Export compilation by regions as at 2018



However, with 40% of our imports are to the rest of Africa, this is likely to offer reprieve in the event that trade restrictions are imposed by other countries.

Chart 2: Exports compilation by country as at 2018



➤ **Short-term inflationary pressures**

Kenya relies on imports from China . These goods are both intermediate and final goods. In the short-term, there may be a decrease in supply due to the shortage. Demand shocks on consumer staples are also likely to push up prices.

As the impact of the initial shock reduces, prices are likely to decrease as lower economic activity in the country is likely to lead to a decrease in demand.

➤ **Slower economic growth**

Reduced consumer confidence and measures that may be taken by the government to contain the virus (including cancellation of sporting events and self-quarantines) are likely to lead to a reduction in economic activity .

The Kenyan economy is also likely to experience slower growth as a result of sectors such as manufacturing, hospitality and tourism being adversely affected by second order effects of the virus.

➤ **Foreign portfolio outflows from the NSE**

The local equity market is likely to witness an increase in portfolio outflow. This is expected to push prices lower.

Investors should take advantage of the lower prices to purchase value stocks that are currently trading below their fair values.

Proposed Measures

The table below shows our view on what the effect of adopting some of the measures that have been adopted by other countries will have on our economy.

Measure	Effectiveness in Kenya
Close schools	Children are at a high risk of infection thus this should help limit the spread
Travel bans	Might reduce the infections in the country. Limit mobility of labour and goods & services
Ban public gatherings	Will contain the virus. It could lead to cancellation of conferences which could reduce economic growth
Postpone/cancelling sporting events	Will reduce any possible spread of virus, reduce income of the athletes and the country as a whole
Shutdown towns	Will reduce spread but also greatly affect production and economic growth
Improve flow of information	Will reduce any possible spread of virus, reduce panic
Close non-essential shops	Will reduce any possible spread of virus. However, it will reduce productivity and have a huge negative impact on growth
Self-quarantine	Effective way to reduce any possible spread of virus,

