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Assessing the Impact of COVID-19 on Africa's Economic Development

Abstract

What started as a single COVID-19 case late 2019 in China, sporadically spread across the whole world within the first quarter of 2020 presenting one of the most serious global health crises with high socio-economic costs. While its impact on the world's health systems including fatalities continue to rise, the economic toll is still unclear as the world faces an unprecedented global recession. This paper estimates that COVID-19 will drag African economies into a fall of about 1.4% in GDP, with smaller economies facing contraction of up to 7.8%. The contraction is mainly a result of export adjustments affecting primary commodity exporters, and the attendant losses to tax revenue which reduce the capacity of government to extend public services necessary to respond to the crisis. Overall, this paper estimates a regional average of about 5% in public revenue losses in Africa, with total merchandise exports contracting by about 17%. The immediate coordination of health specific responses and revamping expenditure on health systems by African governments remains key in thwarting the spread of the virus in the region. This should be augmented by debt moratoriums and increased inflows of other foreign assistance to ensure the availability of resources to fight COVID-19, especially in LDCs. Lastly, in the future, the implementation of the African Continental Free Trade Area (AfCFTA) will play a crucial role in diversifying African economies and helping to shield them from global commodity price volatilities that have continued to dictate the direction of the continents trade and economic progress.

Key words: COVID-19, Africa, LDCs

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Introduction

The 2019 novel coronavirus disease (COVID-19) was first reported in China as an infectious upper respiratory disease. The virus has since spread worldwide presenting one of the most serious global health crises in history, with high socio-economic costs. While the health impacts are directly through contagion, the economic impacts are largely a consequence of the preventive measures adopted by the respective governments to curtail its spread. Key measures adopted by most countries to curtail the spread include the closing of their frontiers and partial or complete lockdowns of economies which among other things, have seen the temporary closure of businesses, schools and social services.

However, these measures have generated significant setbacks for African economies mainly in terms of lost productivity and trade both within and among countries. Specifically, these measures have significantly strained almost all key growth enhancing sectors of many economies, and ultimately, on their overall income. Consequently, different institutions have put forward estimates of the anticipated economic losses that could follow the introduction of these measures. For example, the International Air Transport Association (IATA) projected revenue losses of up to US$113 billion[1] and the United Nations Economic Commission for Africa (UNECA) estimated at least US$65 billion in revenue losses among Africa's top 10 fuel exporting economies[2]. Moreover, due to COVID-19 disruptions in global value chains among other things, the World Trade Organization (WTO) projected a decline in world trade of between 13% and 32% in 2020[3]. Overall, an unprecedented global recession is being envisaged with a world GDP slump ranging between 0.5% and 3.8 %.[4]

While the regional and country specific impacts could be similar in Europe and Asia depending on which sectors were severely hit, due to the continents lack of economic resilience and diversification, Africa faces greater risks of seriously negative impacts from COVID-19 for several reasons. First, being the last region to register COVID-19 cases, Africa was already experiencing the consequences mainly through its trade links with the European union (EU), United States of America (USA) and China, resulting in dwindling markets for African exports. Second, while the infection rates in these regions have started to flatten out with economic stimulus and investment recovery plans underway, the opposite holds for Africa. The number of new cases in Africa have yet to reach the inflection point while elsewhere including China and Europe, the reported cases are tapering off. Although the rest of the world is slowly reopening businesses to emerge from the global slowdown, the trend in African economies entails the possibility of a deeper recession as they are likely to face further production and trade related constraints if the rate of infection continues to rise.

This paper's macroeconometric model assessing the possible effects of COVID-19 on African economies generates conservative estimates based on global scenarios. Therefore, the estimates should not be taken as final projections because of its focus on the global shocks that affect trade between Africa and the rest of the world. All other direct impacts of COVID-19 on Africa's productivity and government expenditure are held constant. Moreover, the analysis does not consider domestic and multilateral measures being put in place to ease the impact of COVID-19 on the respective African countries.

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1 IATA: https://airlines.iata.org/news/potential-for-revenue-losses-of-113bn-due-to-COVID-19-%E2%80%9Ccrisis%E2%80%9D

2 ECA (March 2013)

3 https://www.wto.org/english/news_e/pres20_e/pr855_e.htm

4 IMF, 2020; OECD (2020:2); WB, 2020

1. COVID-19 Statistics and immediate measures for containing its spread

Daily statistics from the European Center for Disease Control (ECDC) show that Africa remains the region with the least number of both COVID-19 infection cases and deaths. As of 15 May 2020, a total of 4,308,809 cases including 298,680 deaths have been reported worldwide. Figure 1 shows that Europe has both the highest number of infections and deaths with 2 persons per thousand population having the infection. This is followed by the USA which has one person per thousand population with the virus.

Figure 1: World Distribution of COVID-19 cases and deaths as of 15 May 2020
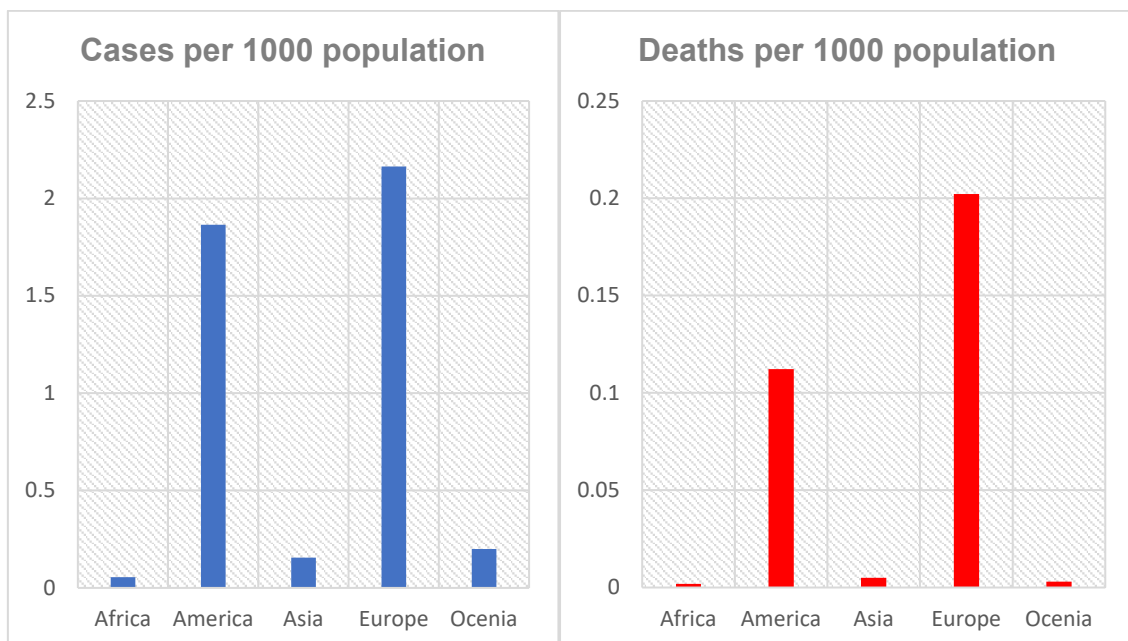
Source: ECDC COVID-19 Data and UNCTAD STATS.
Note: the scales on the embedded charts are different.

Overall, the number of fatalities due to the virus per thousand population is relatively small across all continents. However, interpreting Figure 1 in millions shows that out of 2,164 persons infected per million, Europe is losing 202 persons to the virus. For America, the figure shows that out of 1,864 infected persons per million, the region is losing 112 persons. Figure 1 also shows that Africa has the least number of infections (55 persons per million population) with only 2 persons per million population being lost to the virus.

Figure 2: COVID-19 cases per day in Africa, China and selected countries in Europe as of 15 May 2020
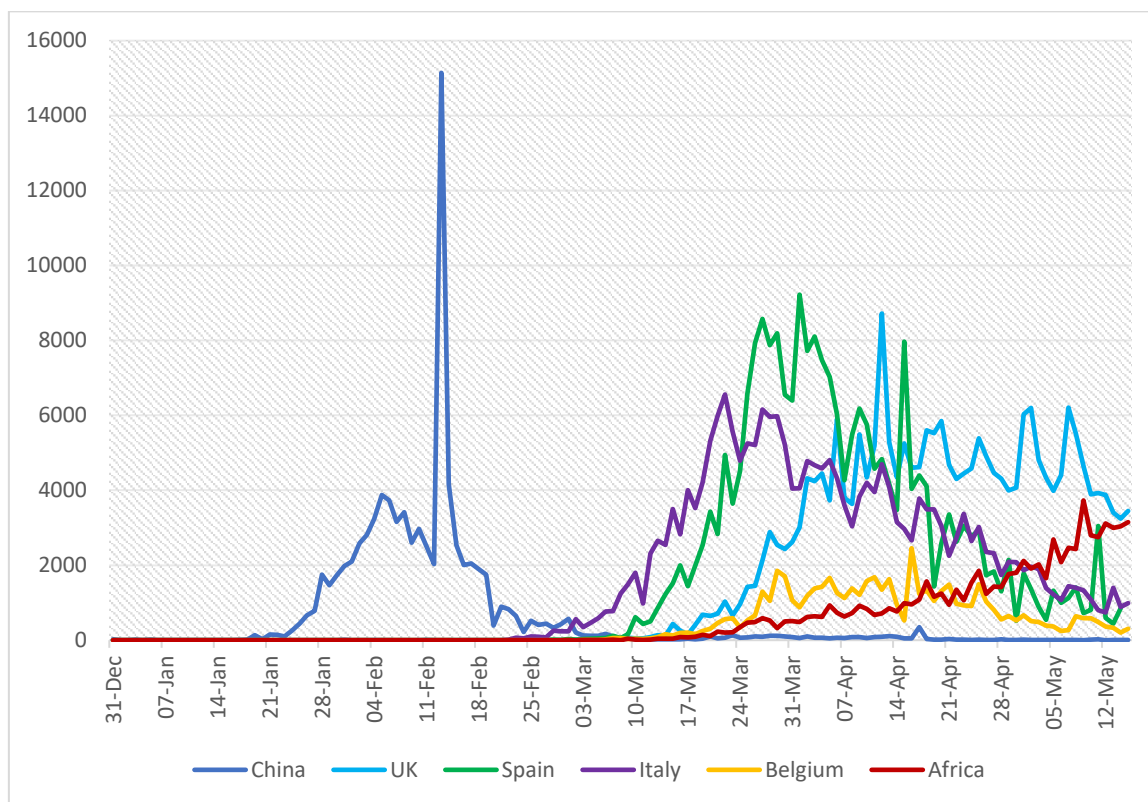
Source: ECDC COVID-19 Data.
Note: UK, Spain, Italy and Belgium are the top four countries in Europe with the greatest number of cases per 1000 population (Appendix 1).

While in China and Europe the infection rates have been significantly flattened out, the infection rates in Africa continue to steadily rise (Figures 2 and 3 (A)). These trends imply that Africa is still grappling with containing the spread of the virus as China and most countries in Europe are rolling out recovery plans and ease lockdown arrangements.

Nevertheless, most countries in the region still have a negligible number of infections with the exception of South Africa (12739), Egypt (10829), Morocco (6609), Algeria (6442), Ghana (5530) and Cameroon (2954) (Figure 3 (B)). These figures imply that for most countries in the region, the main channel for COVID-19 economic impacts have been the trade linkages with their key trading partners such as the EU, US and China.

The stay-at-home (complete lockdown) and frontier closure policies adopted by the highly affected regions including EU, US and China, entailed low productivity and disruptions to key value chains. Ultimately, these lockdowns resulted in reduced demand for African exports with the greatest impact on countries with substantial participation in global value chains. Furthermore, infection containment measures in these regions resulted in significant reductions in Africa's foreign direct investment (FDI) inflows, tourism and to some extent, overseas development assistance (ODA) inflows. Initially, with lower infection rates, the direct impact on health systems and related expenditure for most countries in the region has been modest, however as the health crisis continues, this is changing rapidly. Furthermore, initially most of the countries in the region have

only intensified on the routine hygiene adjustments, semi-frontier closures without complete lockdowns of their respective economies.

Figure 3: COVID-19 Trends per 1000 population in Africa as of 15 May 2020
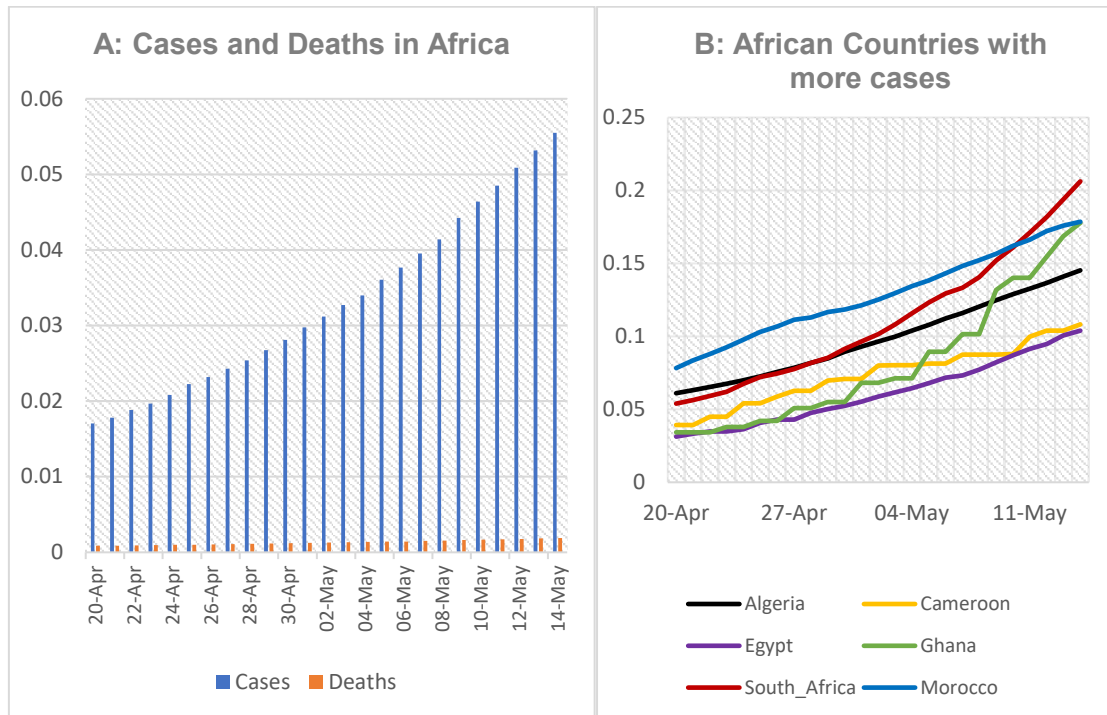
Source: ECDC COVID-19 Data and UNCTAD Stats.

It should however be noted that opting not to intensify stay-at-home (complete lockdown) policies does not only reflect the continents lower infection rates but to some extent, it also reflects the huge social and economic impact of possible lockdowns in most African countries. Notably, government social welfare systems in most African countries are too weak to effectively support the COVID-19 associated lockdowns. Given the significant weight of the informal sector[5] in most African economies, there are many daily wage earners for whom complete shutdown essentially means no income, and no basic household necessities including food. Similar impacts will also be felt by small and informal businesses that sustain the livelihoods of most of the poor. As highlighted above, this further complicates the possibility of a complete lockdown in the face of weak (or none-existent) public social welfare and assistance systems. However, this approach has an increased risk of further spreading the virus within countries.

Cross country transmissions are seen to be significantly reduced by frontier closure policies which have been adopted by most African countries. Nevertheless, this approach further dampens tourism, FDI and most importantly Africa's inter-regional trade which is largely driven by cross border trade and international mobility. Moreover, the approach further undermines the livelihoods of low-income earners who largely benefit from the cross-border trade within the respective economic communities (RECs) in Africa. Overall, the net impact of COVID-19 will largely depend on how effective the current containment measures in the region will remain effective in containing the spread both

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5 The International Labour Organization estimates that more than 66% of total employment in Sub-Saharan African is in the informal

sector. See https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_627189/lang--en/index.htm

within and across countries. Notably, if the increasing trend is widespread across the region, there will be more pressure on health systems and spending which depending on the fiscal policy space, has a potential to further increase the region's debt burden. As shown in this section, a significant slowdown is expected in trade, tourism and service sectors, investment and government spending. Depending on which sectors and trade components that are affected by the general slowdown in world economic activities, disproportionate impacts on key macro-economic variables will be observed across countries in Africa.

2.   Policy responses to ease the impact of COVID-19 in Africa

While the threat of potential recession in Africa is vivid mainly through the international trade links, very few countries have the capacity to implement stimulus packages to cushion their economies form such an impending COVID-19 global recession. Efforts in this regard are recorded in literature (see Ozili and Arun, 2020) and the press mainly for Africa's big economies but most importantly, these do cover all the countries that have been badly hit by the infections. Most of the adopted measures include cutting interest rates and the provision of liquidity assistance to cushion households and firms. For countries with better fiscal policy space, they have also increased their social protection expenditure to effectively cushion the poorest households during the lockdowns. For example, South Africa has set aside about US$ 160 million to cushion vulnerable businesses, about US$ 8.4 billion for the unemployment insurance fund, tax subsidies for at least 75,000 small and medium enterprises with a turnover of less than US$2.7 million, among other relevant fiscal and monetary policies[6] Senegal has established a Euro 2.1 million response and solidarity fund "Force COVID-19" as well as a Euro 97.6 million contingency plan to cushion herself from the impacts of COVID-19.[7] Furthermore, Egypt, Tunisia and Morocco are set to inject US$6.4 billion, US$0.9 billion and US$ 1 billion respectively into their economies as part of their economic stimulus packages for enhancing liquidity during COVID-19.[8]

In addition to the above stimulus packages, Table 1 below summarizes specific key monetary and fiscal stimulus packages that have been adopted by some African countries to ease the impact of COVID-19 on their economies.

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[6] https://www.globalpolicywatch.com/2020/04/south-africas-economic-response-to-the-COVID-19-pandemic/

[7] https://home.kpmg/xx/en/home/insights/2020/04/senegal-government-and-institution-measures-in-response-to-covid.html

[8] https://aaco.org/media-center/news/aeropolitical/several-arab-governments-announce-stimulus-packages-to-ease-the-economic-impact-of-the-covid19-outbreak

Table 1: Stimulus packages announced by African countries to ease the impact of COVID-19

Countries	Interest rate			Fiscal Policy	
	Jan 1	Current Rate	End of 2nd quarter	Increase in government spending (%GDP)	Fiscal Support through loans and loan guarantees (% GDP)
Egypt	12.25	9.25	9.25	0.80	0.80
Ghana	16.00	14.50	14.50		
Kenya	8.50	7.20			
Nigeria	13.50	13.50		2.30	7.50
South Africa	6.50	5.25	4.75		

Source: Adopted from Ozili and Arun (2020).

In addition to the above fiscal and monetary policies, multilateral institutions have also put in place stimulus packages that can be easily accessed by all African countries. These covers both loans, emergency response and debt relief. Table 2 below summarizes these measures from the World Bank, EU, African Development Bank (AfDB) and IMF.

Table 2: COVID-19 multilateral Stimulus packages that benefits African Countries

Institution	Policy Response
World Bank	The World Bank (2020a) announced the availability of US$160 billion which will be available to countries until late 2021. The package is set to enhance the ability of the beneficiary economies in easing the effects of COVID-19 on small businesses and the vulnerable populations.[9]
African Development Bank (AfDB)	The AfDB has a US$10 billion COVID-19 response package in the pipeline of which US$5.5 billion is set for its sovereign operations in the AfDB countries and US$3.1 billion is operations under the African Development Fund. The Bank also launched a US$3 billion fight COVID-19 social bond which was allocated to central banks and official institutions (53%), Bank treasuries (27%) and asset managers (20%). Notably, 8% of this social bond is set aside for African countries.[10]
IMF	The IMF approved US$2.7 billion for COVID-19 related emergency responses in African countries
European Union (EU)	The EU announced Euro 3.25 billion COVID-19 toolkit for African countries.[11]
Afreximbank	The Afreximbank announced a US$3 billion Pandemic Trade Impact Mitigation Facility (PATIMFA) to enhance the capacity of African countries in dealing with COVID-19 related health and economic impacts.[12] In addition, the bank set aside US$200 million to finance the production of COVID-19 equipment and supplies within Africa.

9 https://www.worldbank.org/en/news/press-release/2020/04/09/COVID-19-coronavirus-drives-sub-saharan-africa-toward-first-recession-in-25-years

10 https://www.afdb.org/en/news-and-events/press-releases/african-development-bank-launches-record-breaking-3-billion-fight-COVID-19-social-bond-34982

11 https://ec.europa.eu/commission/presscorner/detail/en/ip_20_604

12 https://www.afreximbank.com/afreximbank-announces-3-billion-facility-to-cushion-impact-of-covid-19/

3.   Methodology

This paper builds a simple macroeconometric model of Africa to forecast and simulate COVID-19 impacts on African economies for relevant policy inference. Its focus is on simulating the impact of the plunge in fuel prices and global recession on Africa's key macro-economic variables including GDP, revenue and exports. The model is comprised of twenty behavioral equations and three identities. Through the dynamic specification, the model accounts for the intertemporal dependency of the respective dependent variables. However, allowing for this dynamic process introduces endogeneity and autocorrelation in the model through the additional lagged values of the dependent variables as regressors. In this regard, for consistent estimates the Generalized Methods of Moments (GMM) estimators[13] constitutes the most widely used in literature.

These estimators largely depend on the levels and lagged values of the endogenous regressors as instruments for addressing endogeneity and autocorrelation in the model.

Implementation of the GMM estimators in Stata is mainly done through xtabond (Allerano and Bond difference GMM), xtabond2 (Blundell and Bond system GMM) and the xtdpd command which implements the dynamic model using either xtabond or xtabond 2. While xtabond uses the level equation for instrumentation, xtabond2 uses instruments from both the level and differenced equation thereby allowing for more instruments and improving the efficiency of the GMM estimation method (Roodman, 2009). This paper has opted for the xtdpd command which implements xtabond2 but also allows for consistent estimates in models with low-order moving-average correlation in the idiosyncratic errors [14].The validity of the model is checked through the within sample estimation. The assessment used data on consumption, consumer price index, expenditure and investment from the World Development Indicators (WDI) database. Data on exports, imports, GDP and world prices was obtained from UNCTADSTATS, and revenue data was obtained from the UNU-WIDER database. [15] Data for all variables was from 2000 to 2018.

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13 These estimators were developed by Anderson and Hsiao, 1982; Holtz-Eakin et.al., 1988; Allerano and Bond, 1991; Allerano and
    Bover, 1995; Blundell and Bond, 1998.

14 https://www.stata.com/manuals13/xtxtdpd.pdf

15 https://databank.worldbank.org/source/world-development-indicators, https://unctadstat.unctad.org/EN/, https://www.wider.unu.edu/data

4. 4.1 Model Specification

Behavioral Equations

Consumption: $C_{it} = \beta_0 + \beta_1 Y_{it} + \beta_2 CPI_{it} + \beta_3 EXR_{it} + \beta_4 Rem_{it} + \beta_5 C_{i,t-1} + \varepsilon_t$

Prices: $\quad CPI_{it} = Б_0 + Б_1 EXR_{it} + Б_2 M2_{it} + Б_3 Y_{it} + Б_4 G_{it} + Б_5 CPI_{i,t-1} + \sigma_t$

Expenditure: $\quad G_{it} = Υ_0 + Υ_1 T_{it} + Υ_2 ODAt_{it} + Υ_3 ODAc_{it} + Υ_4 ppln_{it} + Υ_5 EXR_{it} + Υ_6 G_{i,t-1} + \epsilon_{it}$

Total Revenue: $\quad T_{it} = b_0 + b_1 I_{it} + b_2 TT_{it} + b_3 C_{it} + b_4 Y_{it} + b_5 T_{i,t-1} + \mu_t$

Investment: $\quad I_{it} = a_0 + a_1 S_{it} + a_2 Y_{it} + a_3 EXR_{it} + a_4 FDI_{it} + a_5 I_{i,t-1} + \upsilon_t$

Export: $\quad X_{it} = \alpha_0 + \alpha_1 pw_t + \alpha_2 GDP\_wt_t + \alpha_3 GDP\_wc_t + \alpha_4 EXR_{it} + \alpha_5 X_{i,t-1} + ß_t$

Import : $\quad M_{it} = \rho_0 + \beta_1 \left(\frac{pd_{it}}{pw_t}\right) + \rho_2 Y_{it} + \rho_3 EXR_{it} + \rho_4 M_{i,t-1} + \nu_t$

World prices $\quad Pw_t = \phi_0 + \phi_1 Xw_t + \phi_2 Mw_t + \phi_3 wGDP_t + \phi_4 Pw_{t-1} + ӿ_t$

Identities

$$Y = fcon + I + G + (X - M)$$

$$fcon = C + G$$

$$S = Y - fcon + T$$

Where C is household consumption, Y is Domestic income (GDP), EXR is exchange rate, Rem are the remittances, T is Tax revenue, TT is total trade, ODAc (t) is official development assistance trend and cyclical, I is investment, CPI is the consumer price index, X is the total export value, GDP_wt is the world GDP trend, GDP_wc is the world GDP cyclical, Xw are world exports, Mw are world imports, Pw is the world price, M is the total import value, Pd is the GDP deflator as a proxy of domestic prices, fcon is the final consumption expenditure and G is the government expenditure.

The equation (vi) for total exports has been replicated for fuel, minerals, ores and metals (ores, metals, precious stones and non-monetary gold), food and agricultural raw materials. A similar disaggregation has been undertaken for i world import prices. While the nature of Africa's exports which are largely unprocessed motivated the disaggregation of the equations into these groups, availability of the annual world price data which is disaggregated into these groups, was the main reason for the choice of commodity specific groups for analysis of both exports and imports.

Due to lack of tax data, the following 10 countries have been dropped from the sample of 54 African countries: Central African Republic, Chad, Djibouti, Eritrea, Equatorial Guinea, Guinea Bissau, Libya, Sao Tome and Principe, Somalia and South Sudan.

As discussed above, the paper maintains that the direct impact of COVID-19 through the health system, health expenditure and complete lockdowns is negligible in most countries, ceteris paribus. This assumption is mainly based on the number of infections which have remained largely concentrated in six of the continent's 54 countries.

Therefore, unless the infection trends drastically change, the impact of COVID-19 on most African countries is mainly through their production and trade linkages with the rest of the world (ROW). As such the scenario outcomes of the simulations presented in this paper should not be treated as the ultimate projected impacts of COVID-19 on African countries.

5.   Impacts of COVID-19: Key results from the model

Two scenarios of mild and severe impact of COVID-19 on different aspects of African economies are envisaged, based on global GDP and commodity price projections by the OECD, IMF and the World Bank as shocks from COVID-19 for African countries. The shocks for the mild impact scenario are taken as the average of the lower estimated values for GDP by the IMF, World Bank and OECD - a -1.25% decline in world GDP, a fall in fuel prices of 30% and its attendant effect on major exports and trade costs. In the severe impact scenario, the average estimated COVID-19 related decline in world GDP is 4% and fuel prices are expected to fall by up to 60%.

The estimates from the model presented in Figure 4 shows that exports in Africa will fall by -10.6%% under the mild impact scenario which is largely a consequence of a drop in fuel exports followed by food exports. A significant decline in fuel prices will cause substantial losses in government revenue as observed both under the mild and severe impact scenarios. Overall, there is stagnation (zero change) in GDP from the benchmark under the mild impact scenario. However, Africa's GDP will drop by -1.4% if the impact of COVID-19 takes the world into a deep recession. This deep recession will further see a drop in Africa's total exports by -16.7% with the resultant revenue losses of up to -5.3%. Exports of agricultural raw materials will take the huge nock and therefore be detrimental to African economies depending mainly on this sector such as Benin and The Gambia among others.

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Figure 4: Aggregate COVID-19 impact on GDP, revenue and Exports: Per cent deviations from the baseline
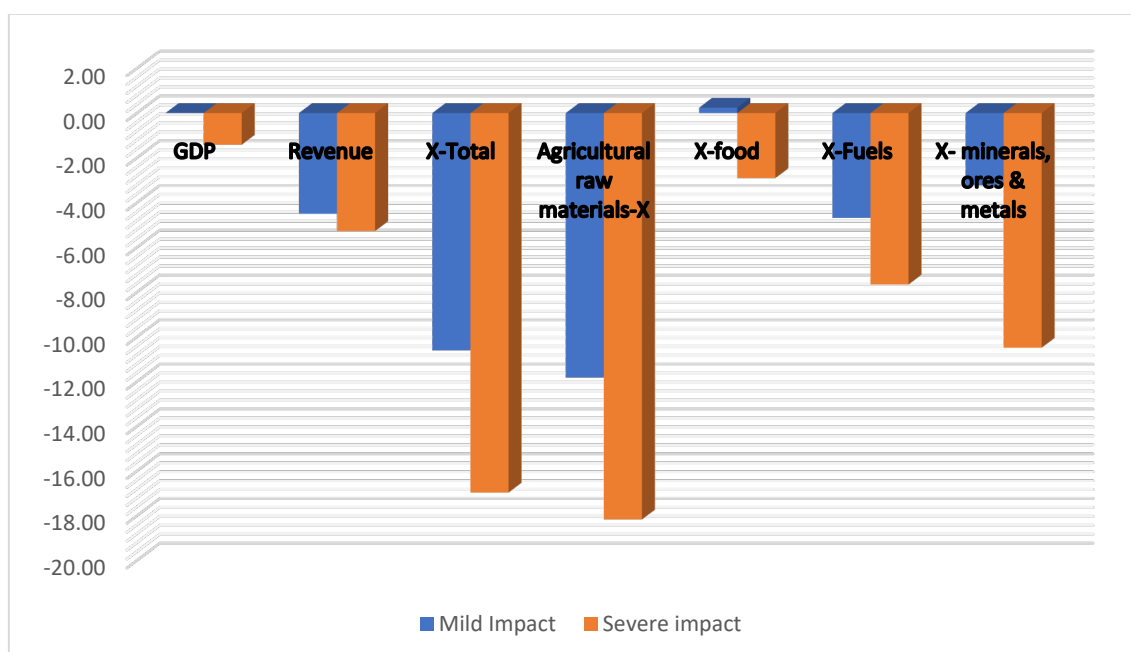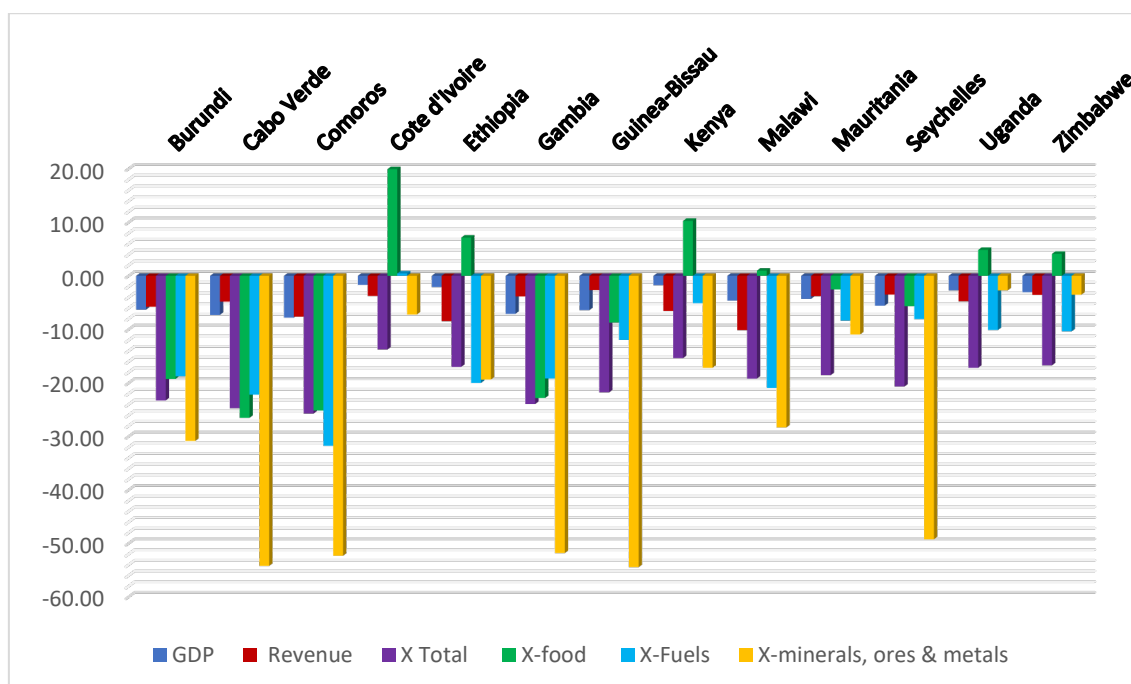

Note: X = exports.

Overall, the impacts of COVID-19 vary across African countries both within and across sectors. The fall in global demand for exports and a slump in prices of major commodities including fuels are the main concerns for Africa. There has also been a fall in Foreign Direct Investment (FDI), which is closely linked to the extractive sector and hence the commodity price cycle (World Investment Report, 2020). The decline in crude oil prices by up to 60% will put significant strains on the revenue of the net oil exporters, particularly those whose revenues are highly determined by crude oil sales. Accordingly, the results in Figure 5 suggest a -11.4% decline in Nigeria's revenue in 2020 with relatively lower revenue falls for the other key exporters of fuels in the region such as Algeria (-2.5%), Angola (-3.8%), Gabon (-2.4%) and Congo (-2.3%). However, the final impact will depend on how the respective countries will take advantage of their respective key markets as frontier closures are lifted with productivity resumed in world. Overall, fuel exports are estimated to fall by -7.7%, with a significant drop in GDP of about -3.3% in Congo and Mozambique.

Figure 5: COVID-19 impacts on some main African fuel exporters: Per cent deviations from the baseline (Severe Impact Scenario)
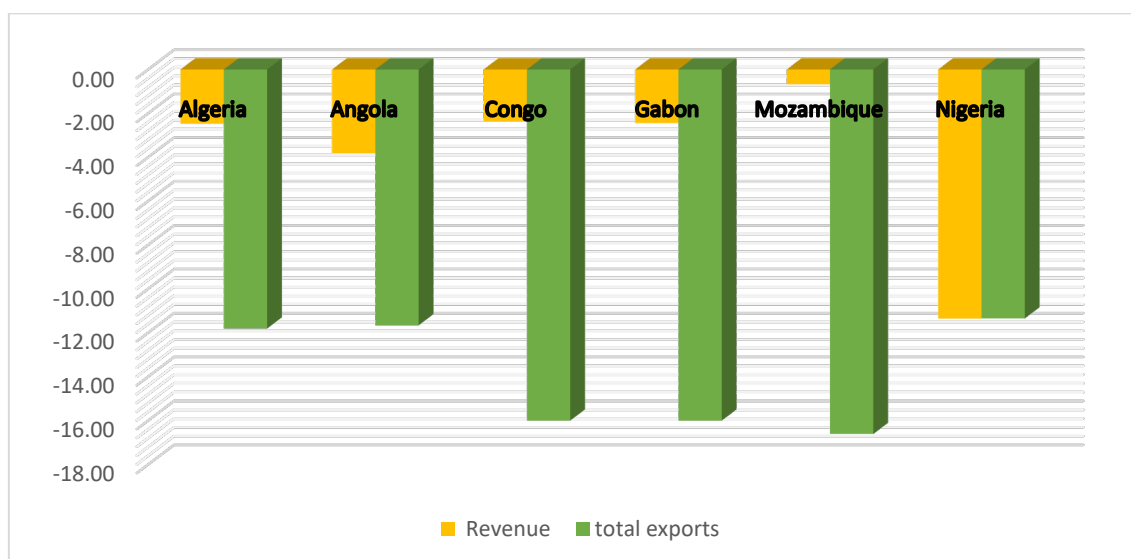
Different trends from the oil exporters are expected for the small agrarian economies who do not only face low export volumes due to depressed world demand, but also through their own productivity slump which may potentially take time to return to equilibrium beyond 2020. As such, the impact of COVID-19 on these countries is disproportionately higher than in the net fuel exporting countries. In the worst case scenario of a deep global recession, this paper estimates that food exports of African economies will decline by about -3% (Figure 4) which will be accompanied by contractions in GDP of -7.8% in Comoros, 6% in Guinea Bissau, -5.6% in Seychelles and -4.5% in Malawi, among others (Figure 6). Although food exports are important, for Small Island Development states (SIDS) like Comoros and Seychelles the key COVID-19 related shock to their economies is due to the collapse in demand for tourism services. Furthermore, the heavy reliance of African LDCs on trade taxes and duties, could lead to severe COVID-19 related revenue losses in countries such as Burundi (-5.8 %), Comoros (-7.6 %), Gambia (-10 %), Malawi (-10.2 %) and Sierra Leone (-7 %), as shown in Figure 6.

Figure 6: COVID-19 impacts on key food exporters: Per cent deviations from the baseline (Severe Impact Scenario)
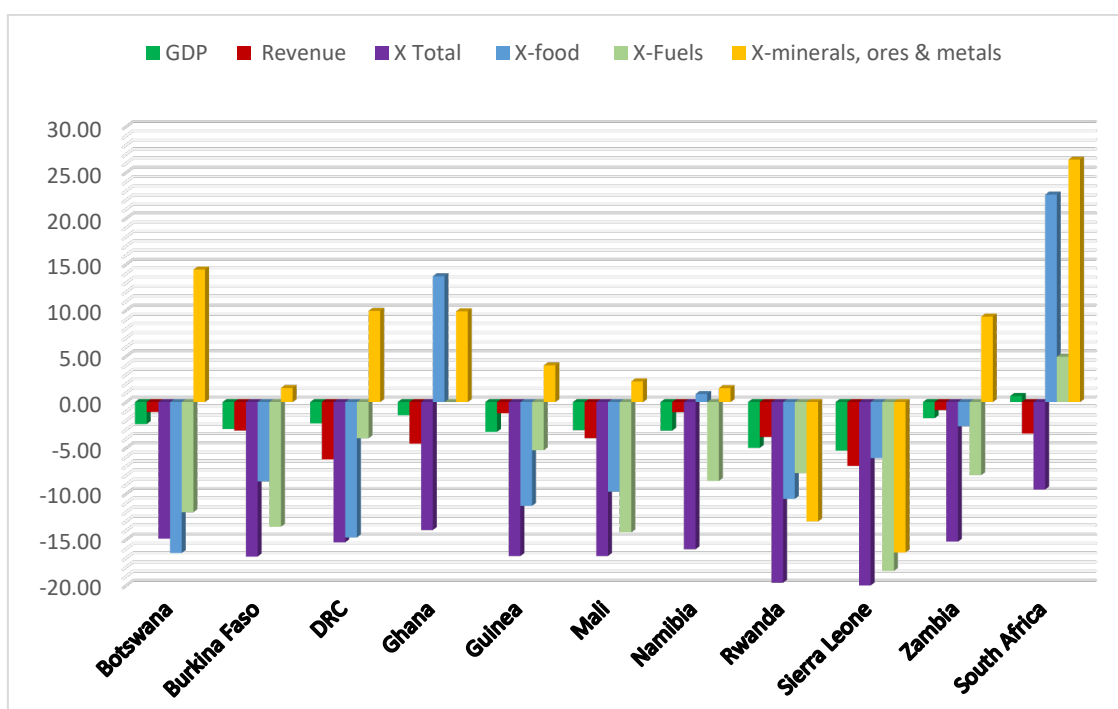

Note: X = exports; X-Fuels is an aggregation of all fuels including crude oil, gas, coal and ethanol as classified under SITC 3.

Revenue losses could also affect the ability of the countries to import critical inputs for their domestic production and food exports. Overall, a protracted global recession causing low demand for their exports with resultant revenue losses may have significant consequences not just for agriculture but also other sectors of their economies with poverty and food insecurity expected to rise not only currently, but also in 2021 (Akiwumi and Valensisi, 2020). Recent food security estimates suggest that 73 million people in Africa are acutely food insecure. This alarming situation is being exacerbated by current COVID-19 crisis[16] through its direct impacts on trade and trade logistics as well as on production and value chains. Administrative restrictions imposed by governments such as lockdowns, travel restrictions and physical distancing measures have also added to the situation. The burden of movement restrictions and lockdowns is being felt particularly strongly by low-income households and those working in the informal economy due to their loss of livelihoods and inability to access markets. Further, despite fuel prices being favorable to net importers of fuels, the recession in LDCs and SIDS economies may also lead to reduced fuel imports as production in other sectors remain depressed. For example, countries like Burundi (-26.6%), Cabo Verde (-8.5 %), Comoros (-30%) and Malawi (-15%) are all expected to import less fuels by the highlighted amounts over the year.

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[16] https://www.afro.who.int/news/COVID-19-could-deepen-food-insecurity-malnutrition-africa

Note: X = exports; X-Fuels is an aggregation of all fuels including crude oil, gas, coal and ethanol as classified under SITC 3.

While there are few food exporters who will have a net increase in food exports over the year, a different story is observed for the key exporters of minerals, ores and metals (minerals). With the exception of Rwanda and Sierra Leone whose exports for minerals will face a significant shock, large increases are observed for South Africa, Botswana, the DRC, Ghana and Zambia (Figure 7). These trends mostly imply that while COVID-19 related lockdowns halted economic activity in the sector, the impact was mainly on delayed demand and not harsh on prices. Secondly, it also suggests that COVID-19 is unlikely to lead to a major structural shift in production and output. As such, once the complete lockdowns are lifted, most economies will be able to resume production at similar pre-COVID-19 levels albeit with a significant delay in reaching their optimal levels due to revenue losses, among other things during the lockdowns. In this regard, Figure 7 shows significant revenue declines in the mineral sector for Sierra Leone (-7%), DRC (-6.2%), Ghana (-4.6%) and Mali (-4%). Overall, the impact of a potentially deep global recession in the sector is relatively better compared to the food sector. Figure 7 further indicates that Rwanda has the biggest impact with a -5 % drop in GDP followed by Guinea (-3.3%) Namibia and Mali (-3.1%) and Burkina Faso (-2.9%).

In sum, a potentially deep recession in the global economy will result in significant losses in Africa with a fall in GDP of -1.4%. Most countries are expected to suffer a recession as a result of the decline in world GDP and fuel prices, but the impact is expected to be disproportionately higher amongst net food exporters. While marginal negative impacts are observed in other sectors, most food exporters may be the worst hit both in terms of revenue losses of up to -10.2 % and GDP declines of -7.8%. Similar trends are observed under the mild impact scenario where the worst hit countries are also net food exporters with large falls in GDP observed for Comoros (-6.%), Carbo Verde (-6%), Burundi (-5.1%), Gambia (-5.7%) and Liberia (-5%).

Coherent and consistent policy responses to the COVID-19 impacts are important for cushioning African countries, especially under the worst-case scenarios. Some countries have already put in place measures to keep economies afloat. For example, apart from marginally reducing the supply of oil, Nigeria has also put in place several stimulus packages to minimize the impact of COVID-19 on the most vulnerable segments of their economy. Similar actions were taken by other countries including Egypt, Ghana, Kenya and Senegal and South Africa. The net fall in GDP, without considering these measures, is marginal but being among the continent's largest economies, a small contraction in their GDP has a higher domestic impact overall than a larger loss in GDP in smaller economies. Of the six countries with the greatest number of registered COVID-19 cases, a significant drop in revenue is observed only for Egypt (-10.6%) which is potentially an effect due to the fall in oil prices. However, an increase in public health expenditure due to the increased number of COVID-19 cases is expected, although the COVID-19 related increase in government expenditure was not considered. In other words, the analysis has only focused on global shocks holding all other direct impacts of COVID-19 on Africa's productivity and expenditure constant. Moreover, the analysis did not include the measures being put in place to ease the impact of COVID-19 on the respective African countries. As such, these results should not be taken as final projections but only as conservative estimates for the year.

6.   Conclusions

COVID-19 cases in Africa are mainly concentrated in six of its 54 countries with infection rates that are still very low when compared to the worst affected countries in Europe, Asia and the Americas. As such, most countries did not intensify the stay-at-home or complete lockdown transmission control measures. However, border closures were widely adopted to control cross-country transmissions. Overall, COVID-19 impacts in most African countries are mainly through their linkages with the global economy, particularly trade. Thus, a drop in world demand and the resultant commodity price drops, affected production and export performance of African countries more than did their own COVID-19 control measures. This has affected mainly commodity exporters, especially those that are involved in key global value-chains such as fuel and horticulture exporters. Using estimates of COVID-19 related falls in global GDP and fuel prices, the paper finds a decline of -1.4% in Africa's income with the worst declines observed in the smaller LDC and SIDS economies. Under the extreme scenario of a severe global recession, the paper projects a significant decline in total exports (-16.7%) on average with significant differences across the sectors and among the countries in the region. However, several countries will suffer worst losses in revenue including Nigeria (-11.4%), Egypt (-10.6%), Malawi (-10.2%), Eswatini (-9.3%) and Ethiopia (-8.5%).

In the short term, African countries should coordinate their health specific responses to arrest the spread of the virus. It should be emphasized that the viral infections are on the rise but only a few countries have the capacity to prevent the worsening of the crisis. Notably, health systems in the region are already overwhelmed with other perennial issues, hence the escalation of COVID-19 cases is likely to put extreme pressure on public health systems. The lag in infections means that Africa will be dealing with COVID-19 long after the rest of the world has controlled it and that could be disastrous for travel and trade within and outside of Africa. The impact of not acting in a coordinated manner to curtail the virus is likely to be higher in terms of costs related to morbidity, lost lives and the opportunity costs of implementing economic lockdowns in the near future.

It is therefore important for the countries to immediately increase expenditure on health interventions to ensure that they bring the COVID-19 infection curves down.

While some countries have in place economic stimulus plans to ease the financial burdens caused by the virus, most countries in Africa do not have the capacity to do so. This implies that if the COVID-19 infection rates in Africa were as high (on a per capita basis) as in some countries in Europe, managing and containing the virus could have required a more coherent and regionally coordinated response than has been observed to date. There is an urgent need for international support for African countries to effectively respond to the crisis as only a few countries have the capacity to put in place economic stimulus packages to ease the burden on people and businesses. In the long term, countries should be supported in the implementation of structural reforms to enable them to build capacity and generate sufficient domestic resources or fiscal buffers to effectively manage pandemics. However, the COVID-19 emergency calls for financial resources to be made available immediately, including from external sources. The international community may also need to extend reprieves on debt and increase other external flows that impact the ability of African governments to extend and deliver effective public health services. Although COVID-19 has affected countries worldwide, it will be particularly important to extend the existing debt moratoria and grants for the Least Developing Countries (LDCs) and to ensure that they continue to access current levels of ODA. This should be exceptionally targeted on essential public services to help eradicate the threat of a global COVID-19 recurrence.

The trade-related impacts of COVID-19 highlight the longstanding underutilization of the regional market by African countries. Commodity price volatilities continue to dictate the direction of economic progress, yet the diversification of exports and increased value addition could help build resilience to shocks in African countries. Potentially, the full implementation of the African Continental Free Trade Area (AfCFTA) which will provide countries with opportunities for growth and economic diversification, particularly through industrialization and manufacturing, could be a game changer for Africa. By addressing the fragmentation of African economies, in the longer run the AfCFTA is also likely to boost agricultural output. According to the World Bank (2020b), the AfCFTA has the potential to increase intra-African exports of agricultural products by 49% by 2035 (compared to 10% growth without the AfCFTA); whilst also lifting between 30 and 68 million people out of poverty. [17]

Finally, African countries should re-examine their respective fiscal and economic-policy priorities, to enhance health and social support systems, particularly in countries that have failed to implement critical health related lockdowns due to a lack of social policy safeguards for both rural and urban populations. In the longer-term, Africa will need to build productive capacities to address underlying economic vulnerabilities and enhance continental capabilities to manage crises.

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[17] https://www.worldbank.org/en/region/afr/publication/for-sub-saharan-africa-coronavirus-crisis-calls-for-policies-for-greater-resilience?cid=afr_tt_wbafrica_fr_ext

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Appendices

Appendix 1: COVID-19 Trends per 1000 population as of 15 May 2020: Countries with most cases and deaths
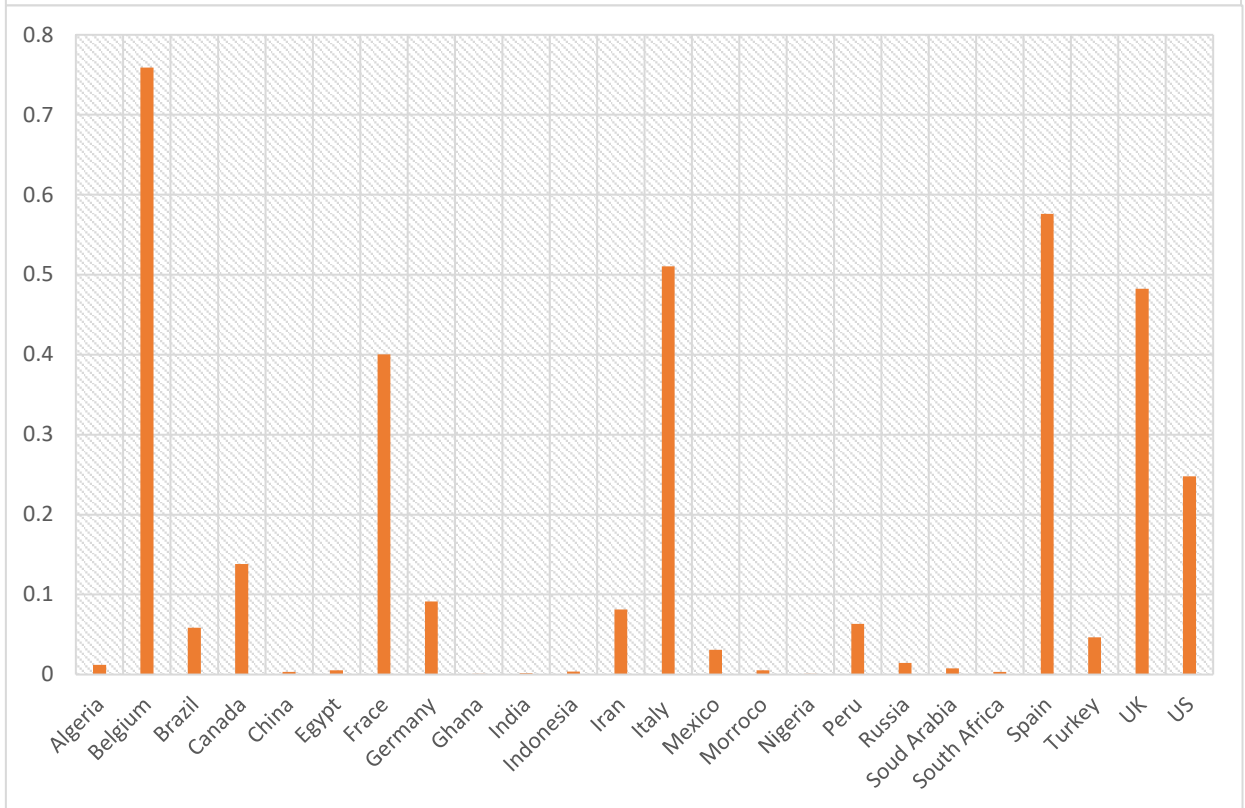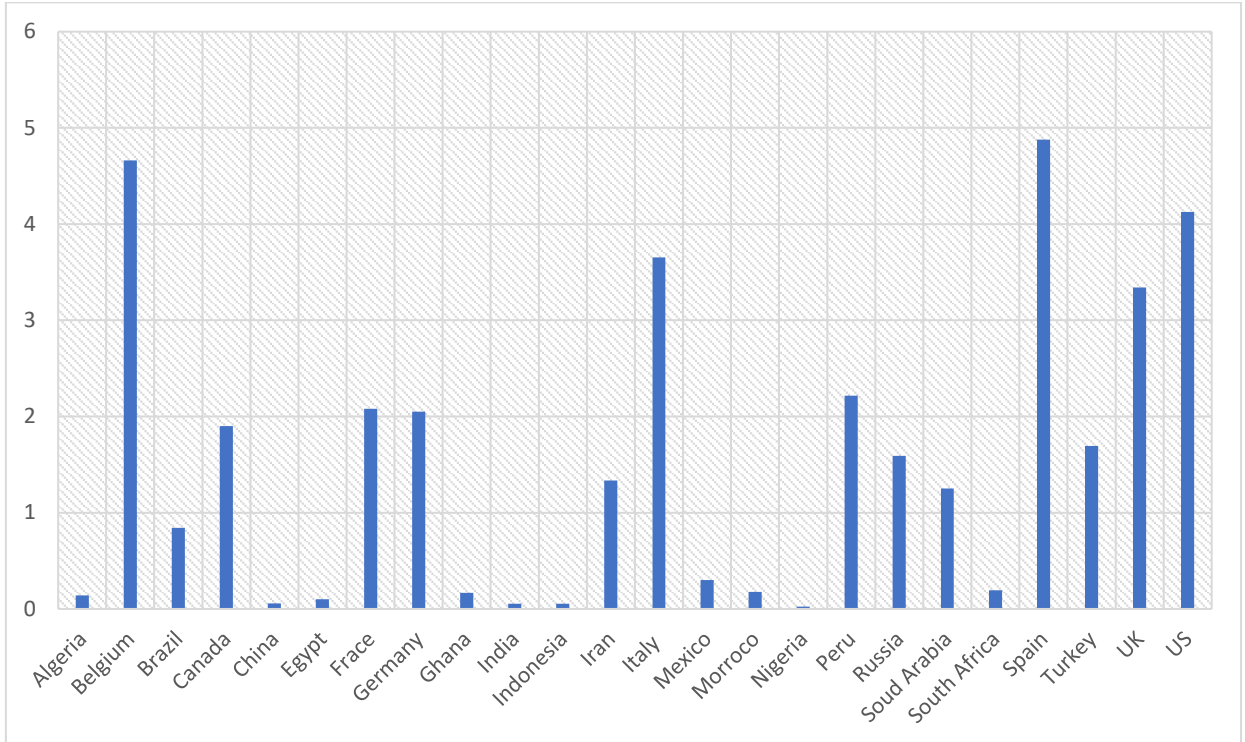
Appendix 2: COVID-19 cases per day in the USA as of 15 May 2020