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# Covid-19 Bulletin

## Country exposure to covid related commodity price shocks: East Africa

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The consequences of the COVID-19 pandemic have gone far beyond the spread of the disease as measures taken by governments to protect the health of the population have caused serious disruption to the national and global economies.

The pandemic is affecting national economies through many channels, including through the global commodity trade and markets. This bulletin provides an overview of the impact of COVID-19 pandemic on the global prices of primary commodities internationally traded by East African countries. It covers 10 countries for which recent and detailed trade statistics are accessible. These countries are Comoros, Ethiopia, Kenya, Madagascar, Mauritius, Rwanda, Seychelles, Soudan, Tanzania, and Uganda.

The effect of the pandemic on the prices of 46 primary commodities is evident from Figure 1 which is based on price forecasts for the year 2020 released in October 2019 and April 2020 by the World

Bank<sup>1</sup>. The price predictions for 2020 reveal that the pandemic has driven most commodity prices down in 2020. Prices are projected to decline for energy products and base metal products by as much as -37.5 percentage points (pp) for petroleum products, and -21.7 pp for zinc products. On the other hand, prices for precious metal products are forecast to rise, by close to 10.0 pp for gold. In contrast, prices for agricultural and food products show a rather mixed picture, with, for example, increases for commodities like palm oil by 12.7 pp and a decrease of similar magnitude (-12.5 pp) for barley.

The impact of changes in global prices for primary commodities

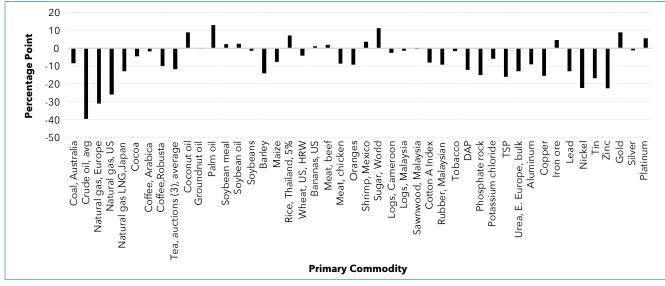
## Global commodity market disruptions and african economies

The pandemic has not left a single region of the world untouched. Its disruptive effects have equally reached into every corner of the global economy. Global primary commodity markets in particular are affected by many of the measures taken to adapt to and control the spread of the pandemic. Measures to minimize the risk of cross-border infections interfere with the normal operations of commerce, slowing down or impeding the movement of goods around the globe. The changes affecting global supply chains can have significant repercussion on national economies. Changes in prices received for exports or paid for imports translate into gains or losses of foreign exchange earnings. The same applies to changes in availability of cargo or the operation of airports and ports, as they affect the cost and volume of goods shipped. Changes in consumer behavior, including under confinement conditions or otherwise, have similar consequences.

The forces of supply and demand ultimately dictate which prices move in which direction. Individual economies are affected based on the exposure to shocks in different markets, which in turn depends on the bundle of goods they sell to or buy from foreign markets. The more their exports or imports are skewed towards goods for which global prices move favorably, the more they tend to benefit and vice versa.

Changes in exported and imported quantities as well as related prices are transmitted to domestic firms and consumers, resulting in changes in production activities and demand for goods, which in turn affect the pace of growth, available incomes and thus livelihoods. The final impact depends on the ability of the economy to adjust to the changing market conditions. The more an economy finds ways to compensate for changes in prices or traded quantities, the more it is likely to minimize the negative impact from global market disruptions.

<sup>1</sup> World Bank. Commodity Markets. Retrieved in July 2020. <u>www.worldbank.org/</u> <u>en/research/commodity-markets#2</u>



Note: Differences between prices forecast in April 2020 and in October 2019 in percentage point (pp) pp) Source: Computation from the World Bank Commodity Price Forecasts, October 2019 and April 2020. Data retrieved in July 2020 from https://www.worldbank.org/en/research/commodity-markets

on individual economies across East Africa depends on the magnitude of price changes for individual commodities discussed above, and on the composition of the basket of primary commodities exported and imported by each country.

As shown by Figures 2 and 4, for instance, primary commodities accounted for 45.7 and 43.0 percent of Kenya's total exports and imports in 2019, respectively. The global prices for most primary commodities exported by Kenya have fallen in the wake of the COVID pandemic (Figure 3). The hardest hit product is tea, contributing for 25.6% of the country total exports with a price decline of -11.8 percentage points (pp). It is followed by coffee (-10.2 pp) and titanium products (-14.5 pp). Figure 5 shows a mixed picture of the changes in import prices. Petroleum products are leading the changes in import prices with a price decline close to 37.5 pp, along with more modest decline in prices for fertilizers (-12.9 pp). The highest increases in import prices are observed for palm oil (12.5 pp) and sugar (11.5 pp).

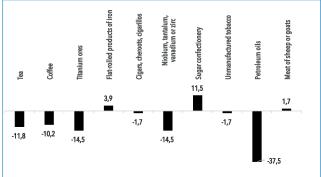
Similarly, primary commodities accounted for 42.4 and 38.3 percent of Ethiopia's total exports and imports (Figures 6 and 8). Coffee is the hardest hit product with a contribution of 27.2% in total exports and a price decline of -10.2 pp. It is followed by soya beans with a more modest price decline of 1.3 pp. The decline in prices for these commodities is partially compensated by a rise in prices for two other products: gold (9.3

pp) and meat products (1.7 pp). The price decline of petroleum products (-37.5 pp), fertilizers (-12.9 to -13.2 pp) and structures (-14.5 pp) are driving the decline of the average import price. In contrast, import prices are rising for palm oil (12.5 pp), sugar (11.5 pp) and rice (7.2 pp), products that heavily contributed to the country imports in 2019.

The above discussion with a focus on just two countries, i.e. Kenya and Ethiopia, shows how different the composition of primary commodity export and import baskets can be.<sup>2</sup> Such differences ultimately determine the magnitude of the global price shocks that individual East African countries are exposed to in the



**Figure 3:** Changes in Predicted Prices in 2020 for Top Ten Primary Commodities Exported by Kenya



Source: Computed from United Nations Commodities trade Database,in JulUnited Nations DESA. Data retrieved in July 2020 from https://comtrade.un.org/dataNote:

Source: Computed from the Commodity Market Outlook (World Bank). Data retrieved in July 2020 from https://www.worldbank.org/en/research/commodity-markets Note: Percentage Point Variation Between April 2020 and October 2019 Forecasts by the World Bank.

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Tea 25.6 %

Coffee 4.3 %

Titanium ores and concentrates. 2.8 %

Niobium.tantalum, vanadium or zirc 1.0 %

Flat-rolled products of iron 1.6%

Cigars, cheroots, cigarillos 1.5 %

Sugar confectionery 0.9 %

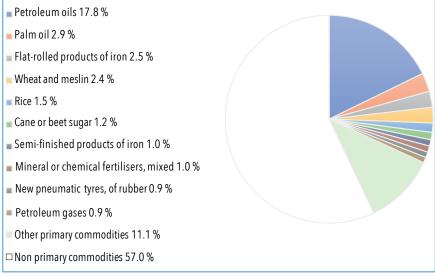
Petroleum oils 0.7 %

Unmanufactured tobacco 0.8 %

Meat of sheep or goats 0.6 %
Other primary commodities 5.9 %
Other commodities 54.3 %

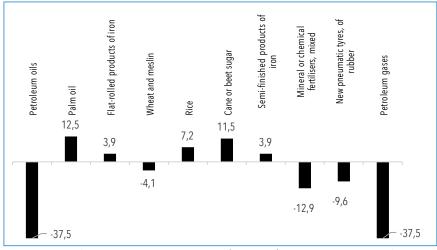
<sup>2</sup> The composition of export and import baskets of the primary commodities and the predicted price changes for relevant individual commodities are available for the 10 East African countries at https://akademiya2063.org/macro-effects-of-tradedisruption.php#data-charts-maps

### Figure 4: Share of Top Ten Primary Commodities in Kenya's Total Imports in 2018



Source: Computed from United Nations Commodities trade Database, United Nations DESA. Data retrieved in July 2020 from https://comtrade.un.org/data

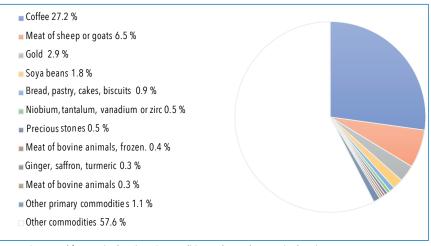
Figure 5: Changes in Predicted Prices in 2020 for Top Ten Primary Commodities Imported by Kenya



**Source:** Computed from the Commodity Market Outlook (World Bank). Data retrieved in July 2020 from https://www.worldbank.org/en/research/commodity-markets

Note: Percentage Point Variation Between April 2020 and October 2019 Forecasts by the World Bank.





Source: Computed from United Nations Commodities trade Database, United Nations DESA. Data retrieved in July 2020 from https://comtrade.un.org/data

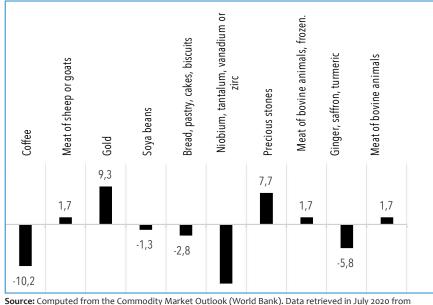
wake of the COVID pandemic.

Figures 10 and 11 summarize the impact of global market disruption on export and import prices among East African countries. The numbers in

the figures represent weighted averages of the changes in prices of individual primary commodities exported (Figure 10) and imported (Figure 11) by each country. As can be seen, the average export prices for primary commodities have been declining for all countries, except Mauritius and Seychelles, in the wake of the COVID pandemic. Unlike the case of other countries, the average price for primary commodities exported by Mauritius and Seychelles increased by 3.6 and 3.2 percentage points (pp), respectively. The different outcome is driven by the differences in the composition of the export baskets of these two countries, dominated primarily by fish products for which prices have increased by 3.7 pp under the pandemic compared to the pre-pandemic predictions. In addition to fish, exports of sugar and diamond have contributed to the increase in average export price for Mauritius.

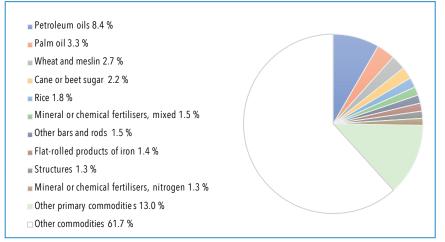
The lowest declines in the average export prices of primary commodities are recorded for Uganda (-3.1 pp) and Sudan (-3.2 pp). For the former, the fall in prices of petroleum oils, coffee and tea are partially compensated by the rise in prices of gold, sugar, and fish. For the latter, the decline in the average export price is driven by the fall in prices of petroleum oils, cotton products and grain sorghum, despite the increase in gold price which represents nearly 35.7% of the country's total exports in 2019. Madagascar records the highest average export price decline at 11.2 pp under COVID compared to the pre-COVID predictions. The decline in prices of basic metals, such as nickel and cobalt, as well as vanilla has been a primary contributor to the fall in the average export price for Madagascar. The average export price decline for Kenya and Ethiopia falls in the middle, amounting to 8.6 pp and 6.0 pp,

Figure 7: Changes in Predicted Prices in 2020 for Top Ten Primary Commodities Exported by Ethiopia

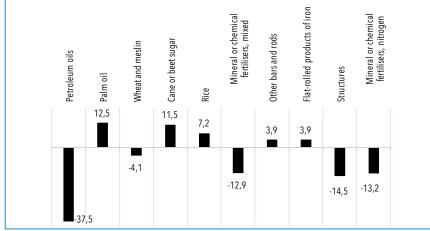


Source: Computed from the Commodity Market Outlook (World Bank). Data retrieved in July 2020 from https://www.worldbank.org/en/research/commodity-markets Note: Percentage Point Variation Between April 2020 and October 2019 Forecasts by the World Bank.

Figure 8: Share of Top Ten Primary Commodities in Ethiopia's Total Imports in 2018



Source: Computed from United Nations Commodities trade Database, United Nations DESA. Data retrieved in July 2020 from https://comtrade.un.org/data



#### Figure 9: Changes in Predicted Prices in 2020 for Top Ten Primary Commodities Imported by Ethiopia

Source: Computed from the Commodity Market Outlook (World Bank). Data retrieved in July 2020 from https://www.worldbank.org/en/research/commodity-markets Note: Percentage Point Variation Between April 2020 and October 2019 Forecasts by the World Bank

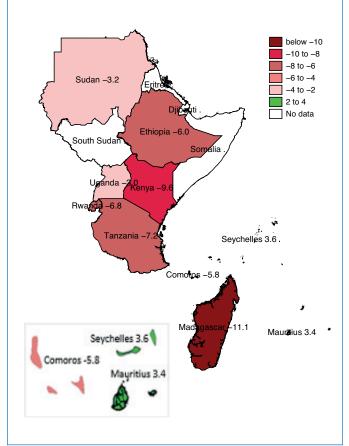
respectively. The decline of tea and coffee prices has been a major driver in both cases.

On the import side, the decrease in average import prices have ranges from -2.9 pp and -3.6 pp for Rwanda and Comoros, respectively, to as high as -20.3 pp for Tanzania. In addition to Tanzania, Kenya, Seychelles, Madagascar, Uganda, and Mauritius all have experienced a high decline in the average import prices, resulting primary from the fall in the price of petroleum oils. In contrast, Rwanda and Comoros faced increases in import prices of commodities such as sugar, rice, palm oil and fish.

Ultimately the impact of global price changes of primary commodities individual on economies will depend not only on the magnitude of the global price shock of primary commodities as discussed above, but also on the contribution of primary commodities in the country's total imports and total exports. In sum, Mauritius and Seychelles are likely to benefit from the price changes in primary commodities resulting from the disruption of global markets. To a lesser extent, Sudan and Uganda also stand to gain thanks to a smaller decline in prices of exported commodities as compared to the decline in prices the pay for imports. In other countries, the contribution of primary commodities in total exports and imports, in addition to the price changes, is a key element to anticipate the direction of the impact of the COVID related commodity price shocks.

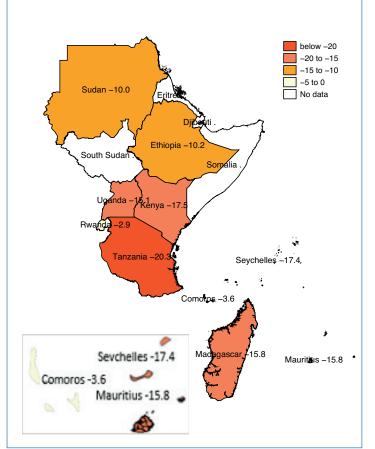
Beyond the price effects, East African economies are also affected by changes in global demand and market access resulting from measures enacted in response to the pandemic, including reduced availability of air cargo and shipping container, changes in port and airport operations from closures to changes in protocols, quarantine, additional documentation requirements, and reduce manpower<sup>3</sup>. These effects need to be included in the assessment of the impact of the disruption of global trade in primary commodities caused by the pandemic. This will be the focus of upcoming bulletin.

**Figure 10:** Changes in Export Price Indices Between October 2019 and April 2020 Forecasts, East Africa (Percentage Point)



Notes: The October 2019 and April 2020 forecasts are made for the year 2020

Figure 11: Change in Import Price Indices Between October 2019 and April 2020 Forecasts, East Africa (Percentage Point)



Notes: The October 2019 and April 2020 forecasts are made for the year 2020

3 COVID-19 and international trade: Issues and actions (OECD). Retrieved in July 2020 from <a href="http://www.oecd.org/coronavirus/policy-responses/covid-19-and-international-trade-issues-and-actions-494da2fa">www.oecd.org/coronavirus/policy-responses/covid-19-and-international-trade-issues-and-actions-494da2fa</a>.







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Note: The boundaries and names shown, and the designations used on maps do not imply official endorsement or acceptance by AKADEMIYA2063.

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