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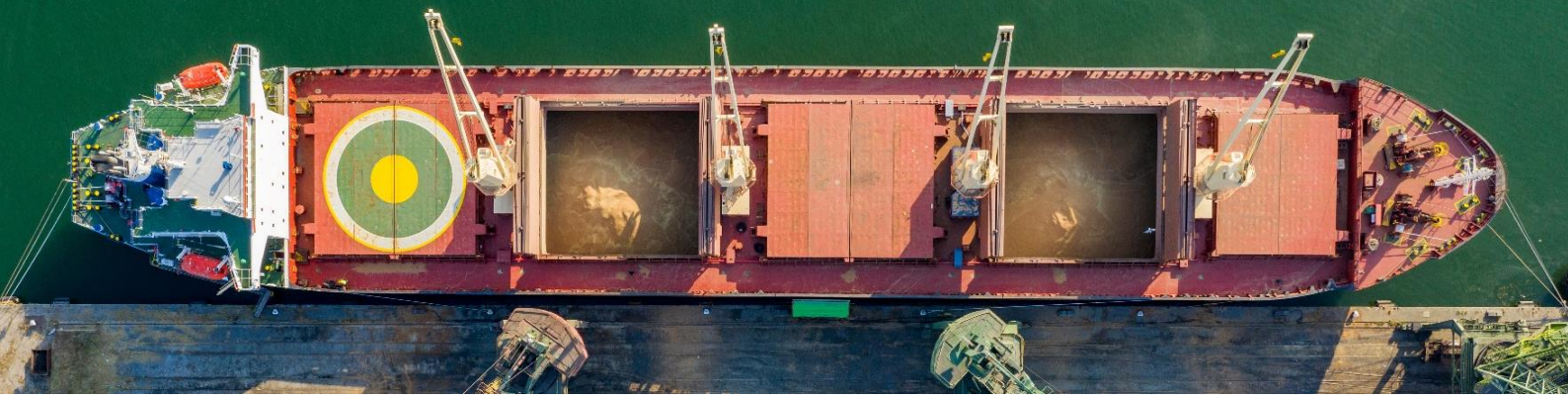

Implications of Russia's invasion of Ukraine for the Kenyan economy

HIGHLIGHTS

→ The Kenyan economy was significantly affected by the global supply chain disruptions stemming from the Russian invasion of Ukraine.

→ The macroeconomic impacts were largely driven by global fertiliser and fossil fuel price increases.

→ The effects of high commodity prices varied among urban and rural households, with low-income groups being more vulnerable to price increases.

→ The Kenyan government's intervention through fossil fuel subsidies contributed to easing the cost-of-living crisis by reducing prices but came at a considerable fiscal cost.

→ Fertiliser subsidies were found to enhance food security by boosting agricultural output, with positive secondary effects on government revenue.

Global repercussions from direct and indirect trade impacts

Russia's full-scale invasion of Ukraine and the ensuing economic sanctions against Russia since 2022 caused a wide range of crises with short- and long-term implications for the global economy and the state of food security around the world. The global food and energy markets immediately felt the impacts of the war, as Russia is among the major players in the global agriculture, fertiliser and fossil fuel markets. In turn, Ukraine is an important exporter of cereals and oilseeds. Export restrictions imposed by other large countries following the outbreak of the war further tightened the trade supply of some essential commodities.

The war came at a difficult time for the world food system, which was reeling from the global disruptions due to the COVID-19 pandemic and reduced harvest due to prolonged droughts in some regions. Its repercussions are expected to severely affect Africa, as most countries on the continent are net importers of cereals, vegetable oils, fertilisers and petroleum products.

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These combined factors contributed to substantially raising global commodity prices, in particular from the start of the invasion until mid-2022. While world commodity prices remain high compared with those of the decade before COVID-19, adjustments to global production and trade flows have allowed most prices to recover to pre-invasion levels. Nevertheless, understanding the vulnerabilities of African economies in relation to these shocks remains important, as it provides lessons for the future in terms of possible policy measures and responses.

Kenya's exposure through direct trade is limited, yet indirect impacts can be sizeable

Kenya's dependency on imports from Russia and Ukraine is arguably low; on average over the past 10 years, 2 % of its imports came from Russia and 0.4 % from Ukraine. The only market with a high exposure is that of wheat, in which Kenya's imports from Russia account for 31 % of total wheat imports. Nevertheless, Kenyan households mostly rely on maize as a staple crop.

Unlike other countries in Eastern and Northern Africa, Kenya is less directly dependent on Russia and Ukraine for its imports. Nevertheless, the indirect effects of the war through repercussions on international commodity markets were significant.

Kenyan households and businesses nevertheless faced the impacts of higher prices in the global commodity markets in which world exports from Russia and Ukraine are significant. In 2022, petroleum prices increased by 40 % (see box 'Price changes for key commodities in 2022') to an annual average of 97 USD/bbl [1]. Fertiliser prices, which were already under tight market conditions before the invasion, also expanded by 28–116 %, depending on the fertiliser type.

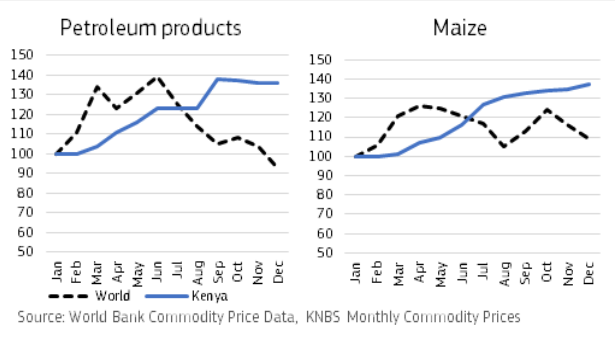
Outside the maize and sunflower oil markets, there have also been positive price transmissions to connected agrifood markets, such as wheat and other cooking oils. Furthermore, owing to food security concerns, several countries have implemented export bans amounting to more than 10 % of calories traded globally, with more than 30 % of Kenya's imported calories exposed to the effects of trade restrictions [2]. The impacts of these restrictions have gradually been felt in Kenya, with domestic prices increasing and remaining at high levels throughout 2022 and expanding into 2023 [3].

Economy-wide modelling highlights drivers of largest negative impacts

A study based on economy-wide modelling [4] highlighted some of the main transmission channels through which the increase in global commodity market prices would affect

Price changes for key commodities in 2022

Changes in prices for key commodities in Kenya have lagged behind those in the global markets by a few months. Despite global signs of recovery from mid-2022, prices in Kenya continued to increase and remained high throughout the rest of the year. In addition, a marked increase in petroleum product prices in September 2022 coincided with the removal of government fuel subsidies owing to fiscal constraints.



Source: World Bank Commodity Price Data, KNBS Monthly Commodity Prices

Kenya's economy. By evaluating the impacts of world price increases in key commodity markets (wheat, maize, vegetable oils, fertilisers and petroleum oil), the study showed that the cost of the war may have been 2.8 % of Kenya's gross domestic product (GDP) in 2022. The increase in the consumer price index (CPI), without considering any effects of monetary policy, was evaluated at 2.5 % relative to a 'no war' counterfactual. The largest driver of this increase was the higher world price levels of petroleum products.

Government intervention to contain price increases can have non-negligible distributional impacts

The study also showed that, with lower economic output, Kenya's government revenue may have declined by 2.8 % relative to the 'no war' counterfactual. Nevertheless, the government aimed to tackle the price surges through two main subsidy packages: KES 100 billion (EUR 810 million) for fossil fuels and KES 3.55 billion (EUR 29 million) for fertilisers. As part of a price stabilisation mechanism, the fuel subsidies represented a de facto reduction in overall duties and levies collected.

The modelling of these government interventions highlighted that fossil fuel subsidies offset the general price inflation to some extent (a CPI decrease of 0.7 %). However, these interventions came at an additional fiscal cost of 5.5 % in government revenue, with no positive impacts on any revenue streams. With this reduction in its revenue, the government may have had to reduce spending in other areas, such as public services and investment, and/or increase borrowing. As the purchasing power was enhanced by a reduction in fuel

prices, food prices may have further increased as aggregate household demand partially recovered, adding to the food affordability issues of poorer households.

Fertiliser subsidies, while much lower in total spending effort, had a notable impact of a 0.6 % decrease in food prices. At the same time, this measure had a net positive fiscal effect, as government revenues from income taxation expanded relative to the counterfactual of no government intervention.

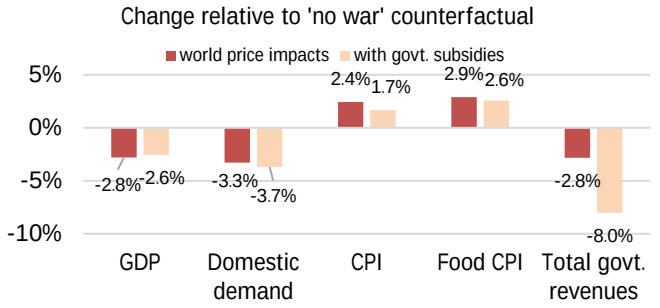


Figure 1 – 2022 impacts derived through economy-wide modelling

Source: [4]

Modelling government revenue. An economy-wide modelling framework allows for the factoring in of indirect and induced effects of economic shocks and policies on government revenue. Government intervention through subsidies can stimulate economic output, implicitly increase household income and boost sales. The overall effect thus captures both public expenditure and the feedback effects on the different government revenue streams (for instance, income taxation).

Low-income households face higher food costs

Higher prices had different implications for rural and urban households. The welfare of urban households, notably that of low-income groups, was more affected than those in the rural areas. These differences are explained by the differences in households' consumption baskets. For urban households, the most important factor in welfare decline was the price increase in petroleum products, whereas for rural households high fertiliser prices and petroleum product prices were equally impactful. In addition, given that rural and low-income urban households spend more of their disposable income on food, they are more exposed to the higher prices of wheat, maize and cooking oils.

The effects of the two subsidy packages on household welfare also depended on the household characteristics. The fossil fuel subsidies benefited the high-income groups, notably those in Nairobi, whereas poorer households, and especially those dependent on government services and transfers, were adversely affected as government revenue further declined. In contrast, fertiliser subsidies had a more uniform effect on households by allowing purchasing power to partially recover across all groups.

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