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POLICY BRIEF

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What does the sustained increase in global fuel prices mean for Uganda?

Executive Summary

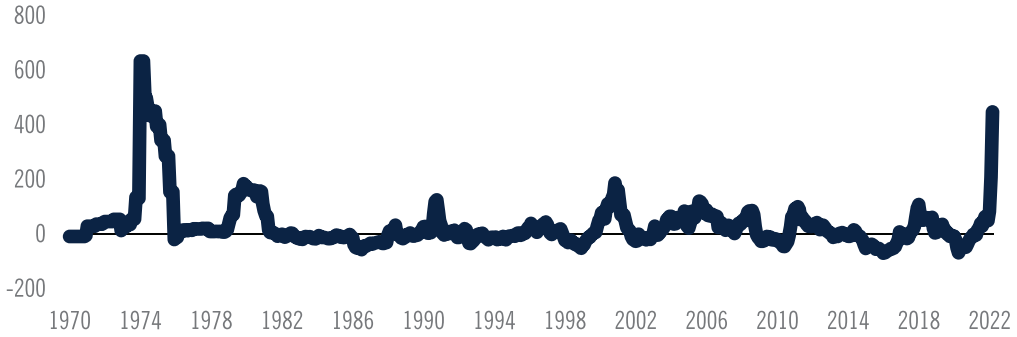
The sustained rise in the cost of energy, in particular fuel, continues to affect the global and domestic economies adversely. By July 2022, the domestic price for diesel and petrol in Uganda had increased by 71.5% and 56.1% compared to July 2021. Fuel supply in Uganda continues to be suppressed because of global oil supply disruptions amidst demand recovery from the COVID-19-induced historical decline. This has driven international prices to record high levels over the past three decades. Local pump prices in Uganda are affected due to international price transmissions as well as domestic market factors. Given the critical role of fuel energy in stabilizing prices and production costs, key aspects of the economy will be potentially devastated – e.g., production, including manufacturing, transportation sector, and household welfare due to cost-push inflation. Feasible measures to cushion the economy include establishing regulatory intervention to control potential manipulation of fuel price movements and instituting a strong fuel reserve system.

Introduction

The sustained rise in the cost of energy, in particular fuel, continues to affect the global and domestic economies adversely. By July 2022, the domestic price for diesel and petrol in Uganda had increased by 71.5% and 56.1% compared to July 2021 (Uganda Bureau of Statistics, 2022). The current surge in energy costs has culminated in a global energy crisis (Anderson and Tippmann, 2022). Globally, the price of fuel energy, measured using crude oil price (OPEC[1] Reference Basket – ORB), increased by more than 20%, from 85.24 USD per barrel in January 2022 to 103.41 USD per barrel in August 2022 (OPEC, 2022)[2]. As shown in Figure 1, the world has experienced the largest energy price increases between April 2020 and March 2022 for any equivalent 23-month period since 1973 (World Bank, 2022). The global energy crisis directly affects local fuel prices for gasoline, diesel and kerosene, thus affecting the economy, households, and other economic actors.

At the global and regional levels, responses to the energy crisis have varied, including - OPEC's phased production scale-up, making use of oil reserves in developed countries, subsidies, and undertaking fuel price regulatory measures, among others. Despite these responses, fuel prices continue to rise steadily. The Government of Uganda did not intervene to curb the escalating fuel prices. It only advised the population to avoid unnecessary travel, not to panic, and warned against raising alarms. This was based on the consideration by the government that the situation is a temporary shock and the potential costs of interventions—especially the potential encroachment on the national reserves. This is illustrated by the regional neighbour - Kenya; it intervened in the fuel markets by offering subsidies and registered a significant decline in international reserves. According to the Central Bank of Kenya, the foreign exchange reserves declined from USD 9.95 Billion (5.86 months of imports) in August 2021 to USD 7.682 Billion (4.43 months of imports) by August 2021 (Central Bank of Kenya, 2022). Kenya was forced to seek an emergency loan of about USD 240 Million from the IMF in July 2022.

Figure 1 Global energy price growth, % (1970 – 2022)



Source: World Bank (2022)

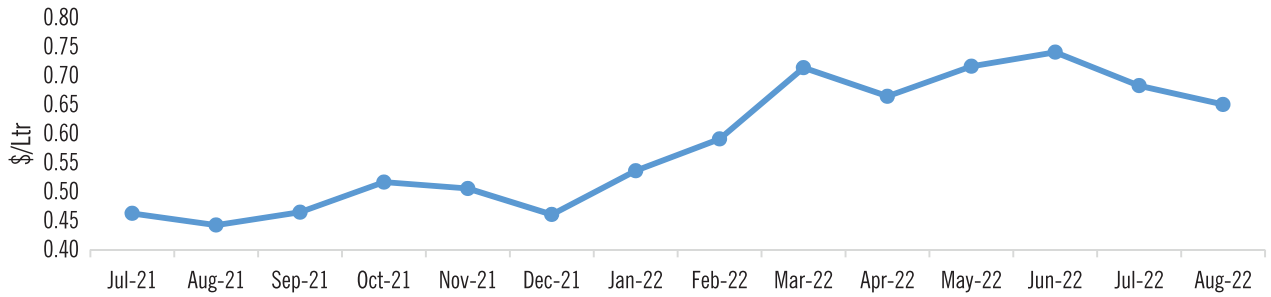
However, the energy crisis that has been thought about as a temporary situation that would normalize soon has failed to normalize. This policy brief discusses the likely implications of the sustained rising global fuel prices for Uganda. The brief follows an earlier analysis[3] and subsequent policy note by the Economic Policy Research Centre (EPRC) on Uganda's pump price changes and drivers for the period up to January 2022. Therefore, it also serves as updated documentation of the evidence – by capturing recent global and domestic pump price movements, potential drivers, and the implications, covering the first half of 2022 with an extension to August 2022. The next section of the brief discusses the recent global and domestic fuel price movements and driving factors, followed by the implications to the economy, and the last section concludes.

Recent fuel price changes and driving factors

The January-June 2022 period has registered a more rapid surge in fuel prices compared to the second half of 2021. Globally, the international price of fuel (based on ORB) increased from 0.59 USD/Ltr in Feb 2022 to 0.74 USD/Ltr in June 2022, with a slight reduction observed between June and August 2022 (1st week). The international price in the first half of 2022 shows an increase from the previous 6 month-average (second half of 2021) to 0.66 USD/Ltr, from 0.48 USD/Ltr - representing an increase of 39% over the same period (Figure 2). This is the highest price ever registered from the outbreak of the COVID-19 pandemic and post lockdown period.

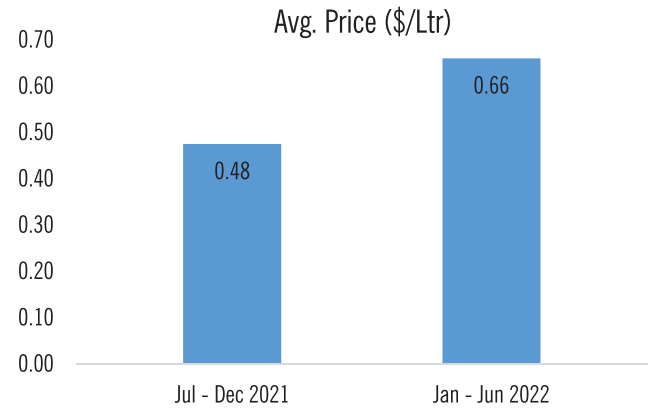
At the domestic level, the pump price exhibits a similar movement pattern to the international price (Figure 2 and Figure 4). The effect of international prices on local pump prices is traced through pump price decomposition and pass-through (Odokonyero and Bulime, 2022). Assuming the pass-through effect holds as per the analysis in the previous policy note (ibid). The increase in international price between February 2022 and June 2022, on average, has led to an increase in local pump price by about 0.3 USD (in the range of 1,100 - 1,130 UG. Shillings). This suggests that the international price surge is still significantly driving local pump prices via the pass-through effect.

Figure 2 Recent international price movement (USD/Ltr)[4].



Source: Author's computation using OPEC oil price data (2021-2022). Price is based on OPEC Reference Basket

Figure 3 Average change in international price, semi-annual



Source: Author's computation using OPEC oil price data (2021-2022).

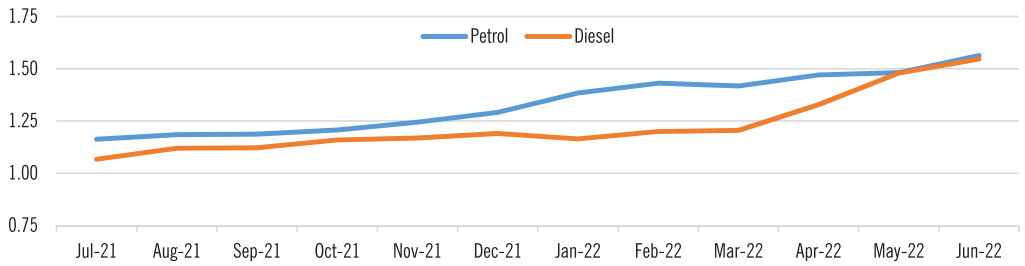
Disaggregated by fuel type, the pump price of petrol and diesel increased by 20% and 16%, respectively, in the first half of 2022, compared to the second half of 2021. Between January and June 2022, petrol pump prices increased by 13%; meanwhile, diesel pump prices increased by more than double that of petrol in the same period (33%). Therefore, diesel's local pump price has risen faster (Figure 4) than petrol, especially in the most recent months. At the end of the second week of August 2022, the petrol pump price had risen to almost 2 USD (more than 6,600 UG shillings)[5]. The three main factors discussed below explain the continued fuel price soar observed.

International oil price remains a key driver of local pump price: The local pump prices mimic the pattern of international prices (see Figures 2 and 4), suggesting that the rise in international price remains a key driver of local pump price through price transmission. This is consistent with our previous analysis of; (a) fuel price decomposition, which illustrates that international fuel price emerges as the most significant driver of Uganda's pump price (comprising the largest share); and also, (b) through the pass-through effect (see Odokonyero & Bulime, 2022). Some factors explaining the rise in international prices include; the continued supply gap from OPEC, a resurgence of demand following the COVID-19 pandemic, and the global decline in oil inventories.

Weak fuel reserve, oligopoly, and absence of regulations: In addition to international prices, the domestic factors that potentially continue to play a role in the skyrocketing pump prices are; fuel shortages, including weak fuel reserve capacity, the oligopolistic cartel-like tendency of the petroleum market coupled with lack of regulatory mechanism.

Effect of the Russian invasion of Ukraine: Since February 2022, the conflict in Ukraine has driven an increase in energy prices globally (EDF, 2022). The spiralling international fuel prices are transmitted to the local pump prices. The conflict has been a key driver of international oil prices. For example, after the Ukraine invasion, a number of western countries introduced financial sanctions that created difficulties in clearing Russian oil transactions through Western banks (*ibid*). This reduced supply and trade in Russian oil, accounting for about 10% of the global oil supply before the conflict. Russia is one of the world's largest producers of liquid fuels and petroleum products. With the conflict, supply and trade in Russian oil dropped to below 10%, creating more supply gap (in addition to the COVID-19-related OPEC gap), which spurred a rapid rise in international fuel prices. The fuel price crisis is aggravated by the recovery of oil demand from COVID-19-induced historic decline, with demand now exceeding the pre-COVID-19 level amidst suppressed supplies. Given the Russian oil supply disruptions, it is highly likely that international and local pump prices will remain high for the rest of the year (*ceteris paribus*), coupled with the fact that most oil refineries across the globe are grappling with meeting high and rising demand (also see

Figure 4 Uganda Fuel Price Movement, July 2021-June 2022 (USD/Ltr)



Source: Author's computation using local oil price data from URA (2021-2022).

Rowena & Rons, 2022)[6].

Implications of the high fuel prices to the economy

The sanctions imposed on Russia due to the war in Ukraine are likely to force Russia to shut more oil wells (IEA, 2022). For example, there is a consensus by European Union (EU) member countries to ban 90% of their oil imports from Russian crude and oil products, which is planned to be implemented in a phased manner over the next 6-8 months (IEA, 2022). This will lead to a more constrained production and supply system. Hence global oil demand will continue outstripping supply through to the following year (2023). Further increases in global demand is thus expected. In 2022 alone, global demand is estimated to rise by 3.36 million barrels per day (Lawler, 2022)[8]. In 2023, demand is expected to rise by more than 2% to a record high of about 102 million barrels per day (IEA, 2023)[8], indicating swift demand recovery. This suggests that international fuel prices are likely to remain high or continue rising, and hence high domestic fuel prices, through the international price transmission mechanism. The sustained high fuel prices will affect all sectors of the economy that use fuel as an input, as well as the welfare of the population. This is because the role fuel energy plays is paramount in the stability of prices and production costs. Potentially, key aspects of the economy that will be devastated due to high or rising fuel prices include;

(a) ***Increased cost of production***: The sustained increase in fuel prices will weaken production systems, especially for activities that use fuel as an input – e.g., manufacturing. This will negatively affect the distribution or supply of goods.

(b) ***Adverse impacts on the transport sector***: The transportation sector will be shattered, given that it is one of the sectors that directly bears the most immense burden of fuel price spikes. Therefore, the cost of transport services are likely to rise, leading to higher transport fares charged by service providers such as; bus, taxi, cargo distribution, and motorcycle operators, among others. Consequently, mobility and distribution of goods and services will be further disrupted. Plausibly, household budgets will be further squeezed as travel costs skyrocket.

(c) ***Rising prices of basic commodities and associated welfare loss***: The rise in fuel prices directly affect the population's welfare, arising from the high cost of living. The cost of fuel energy is critical in determining price stability and production cost, and in general, in influencing inflation from a cost-push inflation perspective. The high or rising fuel price will potentially continue to drive the aggregate price level for goods and services upwards, leading to high inflationary pressure in the economy, hence further deterioration in the purchasing power of Uganda's currency unit. For example, Uganda's Consumer Price Index (CPI) has rapidly risen during the period of steadily rising fuel prices (e.g., February-June 2022)—see Figure 5a. The ultimate effect is a swift upward movement in the inflation rate above the central bank's target rate of 5% (Figure 5b).

Figure 5a Consumer Price Index (CPI), 2022

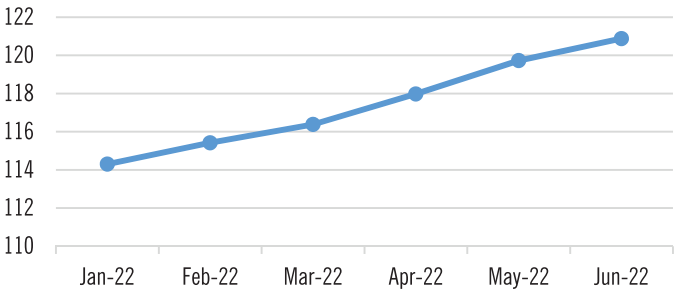
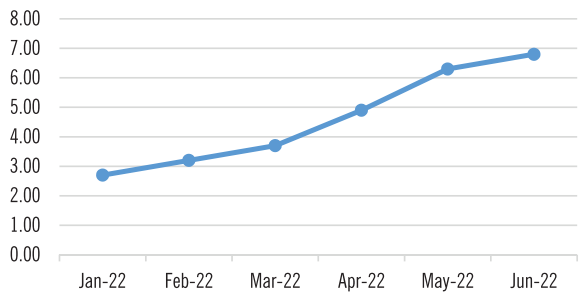


Figure 5b Annual inflation rate, %



Source: Author's computation using CPI and inflation data from UBOS (2022).

The latest CPI and inflation statistics reveal that fuel energy substantially drives inflation. For example, Energy Fuel and Utilities Inflation (EFU) increased from 12% to 14.2% in the year ended May 2022 (UBOS, 2022). This was primarily driven by an increase in the price of petrol, which was associated with a rise in petrol inflation from 35.8% to 45.9% between May and June 2022, thus significantly influencing the increase in Annual Liquid Energy Fuels Inflation from 34.9% to 44.7% over the same period, and ultimately increasing the EFU inflation.

Conclusion

Fuel supply continues to be suppressed because of global oil supply disruptions, including lately the Russian invasion of Ukraine. Demand is outstripping supply, given recovery from the COVID-19-induced historic decline–oil demand now exceeds the pre-COVID-19 level. The demand and supply factors have driven international fuel prices to record high levels. Local pump prices have continued to rise following international price transmission and domestic market factors. The high fuel prices will hit hard different sectors of the economy that use fuel as an input, as well as welfare. Given the critical role of fuel energy in the stability of prices and production cost, key aspects of the economy will suffer devastation—e.g., production, including manufacturing, the transportation sector, and household welfare due to cost-push inflation. Workable measures for Uganda to cushion the economy—especially consumers or households, the transportation sector, and industries from the persistent price shock include the establishment of regulatory intervention to ensure that fuel price movements are not manipulated by oligopolistic cartel-like market players (i.e., for prices to remain a true reflection of prevailing economic conditions); and instituting a strong fuel reserve system.

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Endnotes

1 Organization of Petroleum Exporting Countries – OPEC.
2 https://www.opec.org/opec_web/en/data_graphs/40.htm
3 https://eprcug.org/publication/drivers-of-changes-in-ugandas-fuel-pump-prices-during-the-covid-19-crisis/?wpdmdl=14663&refresh=62f22512d92531660036370&ind=1653437524021&filename=Drivers%20of%20changes%20in%20Uganda%E2%80%99s%20fuel%20pump%20prices%20during%20the%20during%20the%20COVID-19%20crisis.pdf
4 Converted from USD/Barrel to USD/Ltr.
5 This is the average local pump price in Kampala, for premium brands such as Shell and Total Energies.
6 https://www.reuters.com/business/energy/high-fuel-prices-persist-into-2023-wood-mackenzie-says-2022-06-16/
7 https://www.reuters.com/business/energy/opec-sticks-forecast-2022-oil-demand-exceeding-pre-pandemic-levels-sees-risks-2022-06-14/
8 https://www.reuters.com/markets/europe/global-oil-demand-set-rise-2-new-high-2023-says-iea-2022-06-15/

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