The Impact of Escalating Fuel Prices on Businesses in Ghana

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Introduction

For more than a century, oil has powered the world in the form of transportation fuels, and demand for fuel is predicted to rise in the long run, with oil, natural gas, and coal likely to supply the majority of those demands. Oil prices have risen and fallen throughout time. The world oil market is characterized by significant levels of price volatility and uncertainty. These variations have a direct impact on exports and government revenues. Price changes are frequently triggered by supply and demand changes (CEPA, 2021). Other reasons include speculation, geopolitical crises (such as recent happenings in Russia and Ukraine), natural disasters, and so on.

Ghana's petroleum industry is currently comprised of the oil and gas sector. Exploration, production, conversion, refining, and transportation are all part of the petroleum value chain. It also comprises the managerial and regulatory framework, as well as the marketing of the final products to consumers and the infrastructure development that goes with it.

Ghana discovered huge quantities of profitable oil and gas in 2007 (Ghana National Petroleum Corporation, 2008), and the country began producing crude oil and natural gas in 2010. Natural resource fines have contributed and added to Ghana's total exports over the years, yielding real currency in the form of revenue for economic growth and development.

According to the Ghana Statistical Service (2015), Ghana's GDP grew by double digits (14%) in 2011 following two years of oil exports, up from a single-digit growth rate (4.8%) in 2009. Every economy benefits from the discovery of oil and natural gas, as well as petroleum operations. The first benefit is that the government receives revenue and profits from the sale of commodities and corporation taxes. Second, the provision of direct and indirect employment opportunities for citizens, and third, the delivery of primary energy to the economy for domestic consumption. Ghana's petroleum industry currently provides the economy with both the first and second economic benefits described above to some extent.

Furthermore, despite being a petroleum producer, Ghana is still a net importer of petroleum products, according to International Energy Statistics (2018). This is due to a lack of sufficient midstream sector infrastructure facilities to engage in petroleum processing, refining, storage, and transportation of raw and finished products for the country to attain energy sufficiency and security. Since 2000, the Ghanaian economy has been heavily reliant on petroleum, which accounts for 80% of the overall energy mix (excluding biomass) for growth and development.

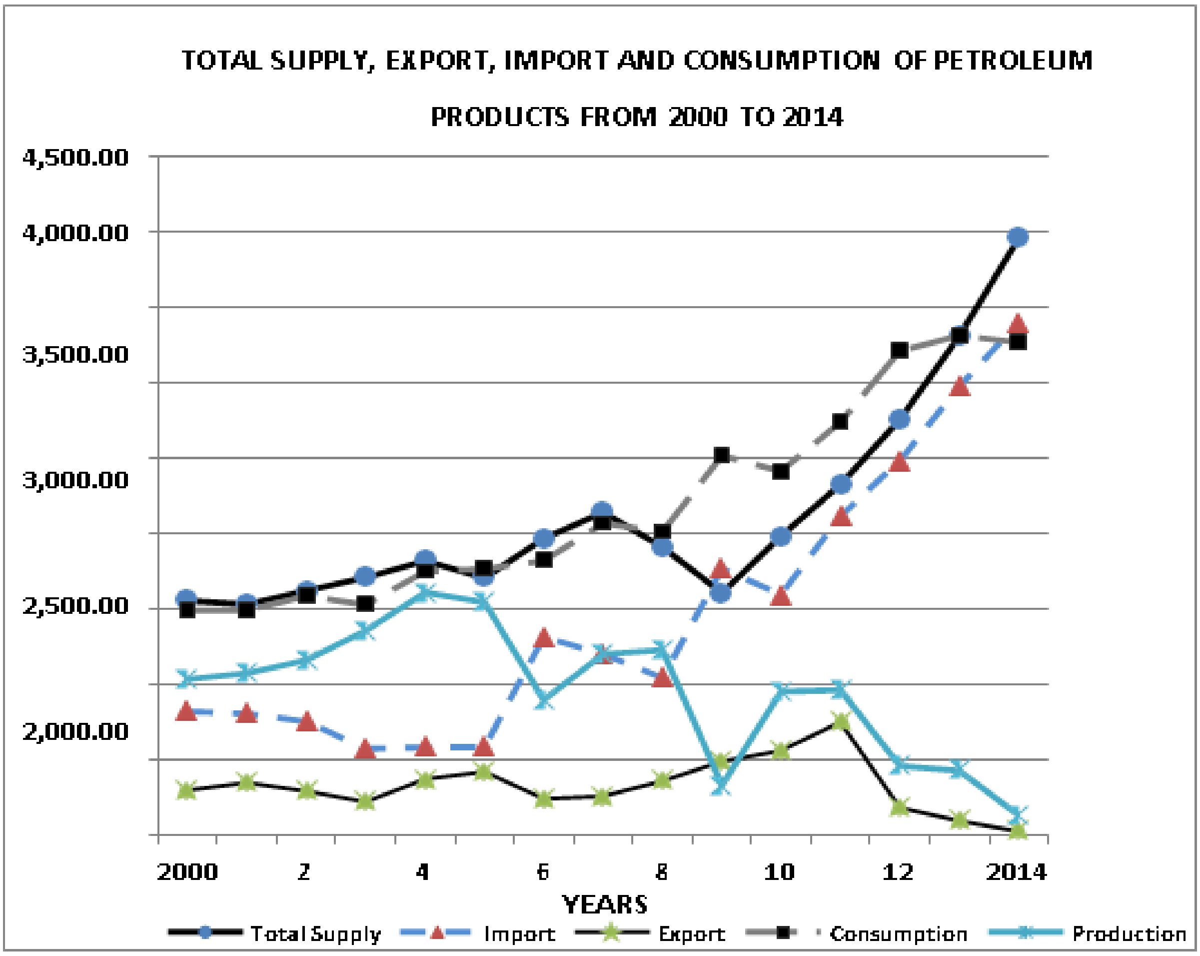
Exports, Imports, Supply and Consumption of Petroleum products from 2000-2014.

Imports of petroleum products hit almost 3.4 million tonnes in 2014, an increase of nearly 15% from imports in 2013. LPG, gasoline, diesel, fuel oil, and aviation kerosene were among the items imported.

Diesel accounted for around 51% of imports, followed by gasolines at 37 %, LPG at 7%, ATK at 3.3%, and fuel oil at 1.4%. However, in terms of percentage points, ATK was the most imported fuel in 2014, with a nearly three-fold increase after a reduction of nearly half in 2013 from 2012.

Marine gas oil (MGO) and heavy gasoline (naphtha) were the main exports, with the former being marketed to foreign boats. In 2014, total product exports plummeted by more than fourfold to around 21,000 tonnes. From around 180,000 tonnes in 2012, it had dropped by nearly half in 2013.

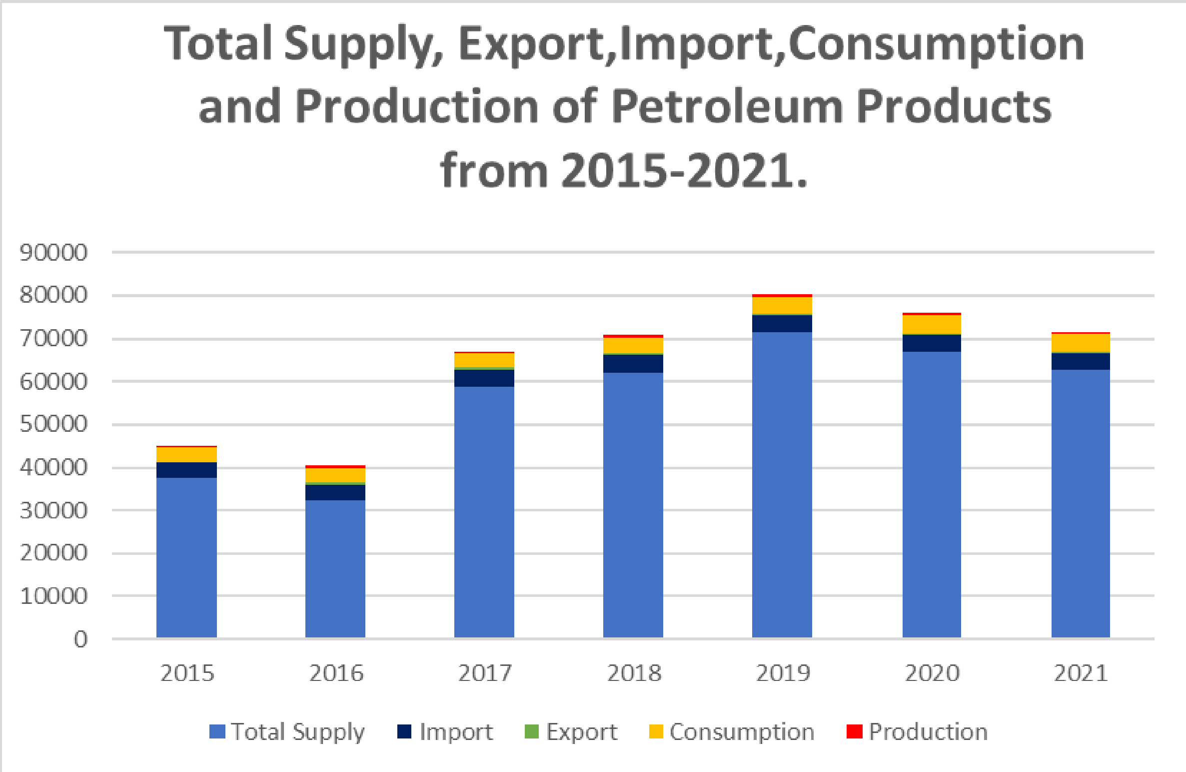
Fig.1.0 Total Supply, Export, Import and Consumption of Petroleum Products (2000-2014)



Source: Ghana Energy Commission, 2015.

However, as of 2021, local output amounted for only around 5% of total production, with imported petroleum accounting for the remaining 95%. (Ghana Energy Commission, 2022).

Fig. 2.0 Total Supply, Export, Import and Consumption of Petroleum Products from 2015-2021



Source: TOR, GNGC & NPA.

In other words, while producing vast amounts of petroleum and having promising possibilities, Ghana faces difficulties importing petroleum products (processing and storage facilities). To put it another way, the petroleum sub-sector is being challenged by government attention and private sector investments to build midstream to downstream infrastructure to improve petroleum processing, storage, and transportation in order to meet local market demands. Analysis in Figure 2.0 shows that from 2015 to 2021, exports of gasoil and gasoline (including gasoil deliveries to ships engaged in international marine bunkering) rose by 28.9% and 0.6 percent, respectively. However, export volumes of gasoil and gasoline fell by 92 percent and 95.4 percent, respectively, in 2020 and 2021 compared to 2019.

The ultimate consumption of petroleum products has risen above the level of the 2000s in the last six years. From 3552 ktoe in 2015 to 4,425 ktoe in 2021, it climbed at a compound annual growth rate of 5.6 percent. Over the last 20 years, gasoline and gasoil have accounted for 36.4 percent and 51.8 percent of total petroleum products consumed in the country, respectively.

From figure 1.0 and figure 2.0, it can be observed that there were fluctuations in the production of petroleum products, however, consumption has risen in recent years as a result of economic expansion, but supply is mostly reliant on imports, while domestic output of petroleum products has plummeted.

Fuel Prices from 2017 to 2022

Oil prices have taken a toll on both local economies and the global economy during the last five years. Consumers in deregulated economies like Ghana and India have had to pay the full cost of petroleum consumed, which is determined by major variables like the average world oil price (crude and refined), supplier's premium, freight and insurance premium, taxes and levies, and foreign exchange risk. For Ghanaians, the last 53 months have been a nightmare, as they have had to deal with constant hikes in fuel prices.

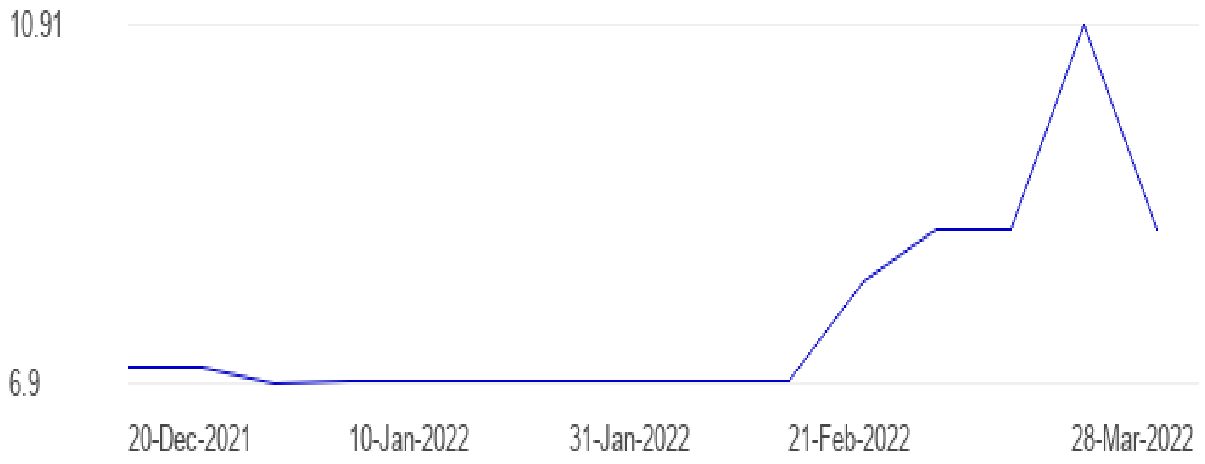
Even the revision and neutralization of the Price Stabilization and Recovery Levy (PSRL) aimed at reducing the impact of rising oil prices on consumers on the international market, as well as the downward review of the Special Petroleum Tax (SPT) embedded in Ghana's Petroleum Price Build-Up (PBU), could not prevent petrol prices from rising by over 38 percent between January 2017 and June 2019 to sell at Ghs5.25 per litre (equivalent to one US dollar). Moreover, there is a 64.15% increase in fuel prices from June 2019 to March 2022. That is from GHS 5.25 to GHS 8.618. This is very alarming and detrimental to all the economic agents in their operations that relied heavily on fuel consumption.

The increase in the price of gasoline in percentage terms during the last four years is mostly due to the strengthening of worldwide refined oil and crude oil prices. Consumers' problems were exacerbated by the local currency's fall against the US dollar.

Fuel prices at some fuel stations continue to rise, crossing the GHS 8.00 per litre mark in the first week of March 2022.This is expected to have a ripple effect on other Oil Marketing Companies, which will also adjust their prices upwards. Only two weeks ago, fuel prices averaged GHS6.4 per litre as the Price Stabilisation and Recovery Levy (PSRL) was reinstated by the National Petroleum Authority. The Institute for Energy Security (IES) has predicted a four percent increase in the prices of Liquefied Petroleum Gas (LPG), Diesel, and Petrol at the pumps in the first pricing window of March. On March 30, 2022, Fuel prices stood at GHS 8.618 per litre (GHS 32.623 per gallon).

A barrel of Brent Crude Oil which was going for about $66 a year ago, and $78 at the start of 2022, jumped 7.3% to $103.9 a barrel in February.

Fig.3.0 Ghana: trends in gasoline prices per litre from December 2021 to March 2022.



Source: Global petrol prices 2022. (https://www.globalpetrolprices.com)

Impacts of escalating fuel prices

Fuel prices continue to be a major factor on domestic and global economic performance. Increases in fuel prices have serious effects, as they affect a variety of macroeconomic factors such as production costs, inflation, interest rates, employment, and freight rates.

Increases in gasoline and diesel costs have a direct and indirect impact on all key sectors of the economy, including agriculture, transportation, manufacturing, and production. This, in turn, has an impact on the prices of everyday necessary commodities that are used, such as food, utilities etc.

Firms and Businesses: Higher fuel prices raise freight expenses and production costs, particularly for businesses that utilize fuel as a key input (such as power utilities, farmers, and processing industries) and pass on the additional costs to the end consumer. Small and Medium Scale Enterprises (SMEs) in Ghana have struggled to survived within these precarious conditions. Inasmuch as many large businesses can cope and manage the frequent adjustments in fuel prices, the small and medium enterprises are faced with daunting challenges. The end result is that the increase fuel prices will be channelled to the final consumer in the course of purchasing goods and services.

It essentially means that the cost of necessary goods and services such as fruits and vegetables, as well as other goods and services, will rise. Moreover, increased production costs have a negative impact on demand for goods and services, corporate profitability, wages, and employment, among other things.

Motorists: Rising gasoline costs have resulted in an increase in the amount of money motorists spend on fuel each month for the same distance travelled. Back-of-the-envelope calculations reveal that a person driving 1050km per month in Accra will see monthly fuel expenditures increase by about Gh250 ($46.74) for a petrol automobile in March 2022 compared to January 2019. (Based on 42 kilometre per gallon journey).

Those who drive vehicles with minimal carbon footprints are greatly buffered compared to those who drive less efficient vehicles. Stop-start technology, which is typically featured in higher-end automobiles, relies on computers to detect when the vehicle is stopped and shut down the engine, reducing fuel consumption and emissions.

Commuters and public transportation: Transport operators are the most vulnerable to gasoline price hikes because it is still a key input in their operations. Individual transportation operators, who continue to establish their own prices in the absence of a single transportation economic regulator, are compelled to pass on the additional cost to commuters in the form of higher rates, which are often confusing. The transportation industry, whether by land, air, or water, is the sector most affected by increasing gasoline prices, as vehicles rely on fuel to function. Transportation charges rose as a result of the increase in gasoline prices. The electricity sector has a significant influence since it requires a substantial amount of fuel to generate power. The impact of rising fuel prices on this industry will result in higher production costs when it comes to generating power. Increases in gasoline prices have a significant impact on the chemical manufacturing industries, as petrol is a key component in the production of chemical products.

Increased rates are also likely to encourage more individuals to walk or use other modes of transportation, reducing the number of people using the traditional transportation system.

Households: Increases in fuel prices reduce disposable income by increasing household budgets for not just fuels, but also transportation charges, vital commodities, and other goods/services such as utilities and automobiles. Households may be forced to reallocate resources by saving less or cutting back on expenses if fuel prices remain high for an extended length of time.

The impact of rising gasoline prices on rising production costs in each economic sector will lead to price increases across all the sectors, which will collectively lead to national inflation. Inflation will rise in lockstep with fuel prices.

Conclusion

Higher oil prices may cause major damage to local economies, particularly companies, if the price of oil remains a critical macroeconomic component.

To control gasoline prices and preserve economic progress on a local level, the government must rethink how fuel demand is satisfied, focusing mostly on fuels generated at the local refinery (below import parity) rather than imported fuels. It may propose revising the taxes and levies on a litre of gasoline, as well as strengthening the local currency versus key international currencies.

References

Awunyo-Vitor, D., Samanhyia, S., & Addo Bonney, E. (2018). Do oil prices influence economic growth in Ghana? An empirical analysis. Cogent Economics & Finance, 6(1), 1496551.

Ghana Energy Commission. 2015. Supply and Demand outlook for Ghana

Ghana National Petroleum Corporation, 2008. Yearly report

Global petrol prices 2022. (https://www.globalpetrolprices.com)

National Research Council. (2021). Renewable fuel standard: potential economic and environmental effects of biofuel policy. National Academies Press.

National Energy Statistics. (2020). Securing Ghana's Future Energy Today. Data extracted from National Petroleum Authority (NPA), Ghana National Gas Company (GNGC), Tema Oil Refinery (TOR)

Rahman, A., Dargusch, P., & Wadley, D. (2021). The political economy of oil supply in Indonesia and the implications for renewable energy development. Renewable and Sustainable Energy Reviews, 144, 111027.

Scholvin, S. (2021). World cities and peripheral development: The interplay of gateways and subordinate places in Argentina and Ghana's upstream oil and gas sector. Growth and Change, 52(1), 111-129.

Appendix A.

Total Supply, Export, Import, Production and Consumption of Petroleum Products (2015-2021)

Year	Total Supply	Import	Export	Consumption	Production
2015	37458	3650	116	3552	89
2016	32298	3632	662	3320	739
2017	58652	4076	692	3162	133
2018	62135	4224	336	3593	390
2019	71440	3829	505	3849	690
2020	66927	3965	305	4255	580
2021	62590	3895	302	4425	184

Source: Researcher's compilation from TOR, GNGC & NPA