

Freeze the Market Prices: Two National Energy Companies Alleviates World Inflation Impact on Taiwan

BY HUEI-CHU LIAO

Abstract

Beginning with the implementation of freezing the market price by two national energy companies, which did calm down Taiwan's economy, and reviewing some windfall tax literature, the author suggests that current energy liberalization systems should reconsider some mechanisms, such as freezing the market price to cope with sudden great impacts.

Two National Energy Companies in Taiwan Freeze the market price

Compared with many people suffering with the high inflation rate due to the Russia-Ukraine war all over the world, people living in Taiwan experience a lower inflation rate since two national energy companies absorb most of the rising energy costs. Figure 1 shows the weekly unleaded gasoline price in Taiwan from Oct. 31, 2021 to Oct. 2, 2022. Obviously, this price trend is much flatter than many countries in the same period such as the price trend in USA shown in Figure 2. In order to stabilize the market price, the state-owned oil refiner, CPC Corporation, Taiwan (CPC) froze the gasoline price in some of the worst periods. Since Taiwan imports almost 100% crude oil from other countries, CPC must pay a higher crude oil international market price. In the worst period, CPC needs to absorb cost up to NT\$6 per liter (around 0.76 US dollar per gallon) to flatten the gasoline price. It is said that in the worst scenario case, CPC may lose up to NT\$180 billion in 2022.

Another state-owned company (Taiwan Power Company, Taipower) also calms down the energy price by freezing electricity prices for its customers. Although the Taiwan government has implemented power market liberalization for more than 20 years, it has only liberalized the power generation sector in the past two decades, the wholesale market is liber-

alized only for the green power market recently. Taipower still controls the whole power market by integrating the power generation, transmission, distribution and sale markets. Except for very small shares of green power, all power users must buy power from Taipower. The total power sold by Taipower accounts for more than 99% of the power sales market in 2021. With this market domination, Taipower can easily compensate the electricity prices for all consumers by freezing the electricity price. However, the electricity price of large power users in the industrial and services sectors rise up to 15%, while in the residential sector up to 9% to cover a small share of the rising cost. Since natural gas and coal prices increase much more than crude oil prices in the world market, Taipower faces a more severe situation than CPC. Finally, The Ministry of Economic Affairs in Taiwan reached a preliminary consensus to give NT\$150 billion (around 50 billion US dollar) to Taipower in the general budget of 2023.

Windfall Tax on Oil and Gas Companies

Windfall tax on oil and gas companies is a hot issue after the Russia-Ukraine war. Although many households and firms are suffering from the high energy cost, some giant oil and gas companies are earning huge profits. IMF (2022) pointed out that the return of equity (percent) of some companies in 2022 are even up to 55% (Enquire), 45% (Conoco) and 44% (Saudi Aramco). In order to rebalance the economy, many

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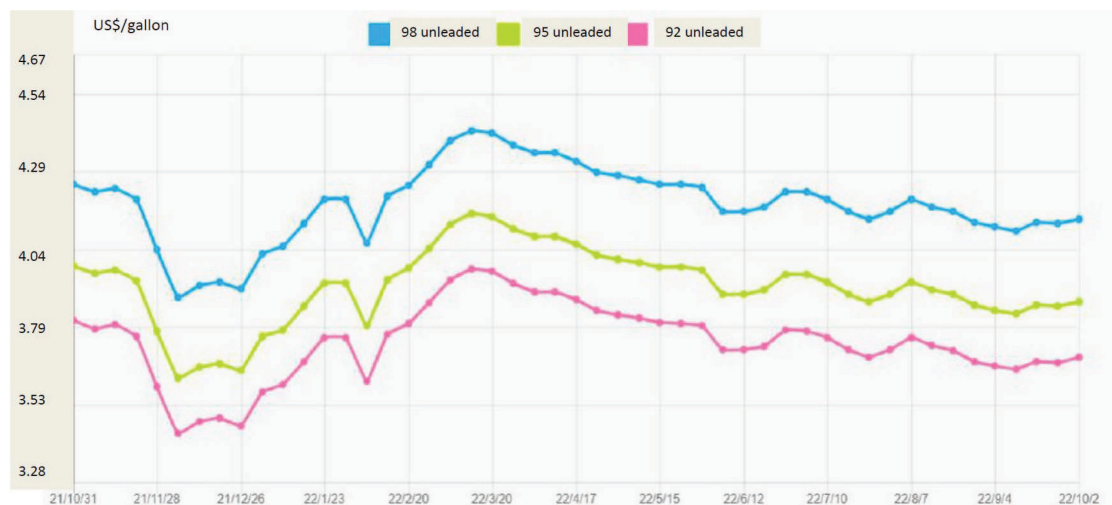


Figure 1: Weekly Unleaded Gasoline Price in Taiwan (Oct. 31, 2021 to Oct. 2, 2022)

Data Sources: <https://www2.moeaboe.gov.tw/oil102/oil2017/A03/A0302/sys28.asp>

Note: The author redraws the figure by changing the unit from NT\$/liter to US\$/gallon assuming the exchange rate is 1 US dollar equals to NT\$30 dollar.

Regular Gasoline Prices

(dollars per gallon)

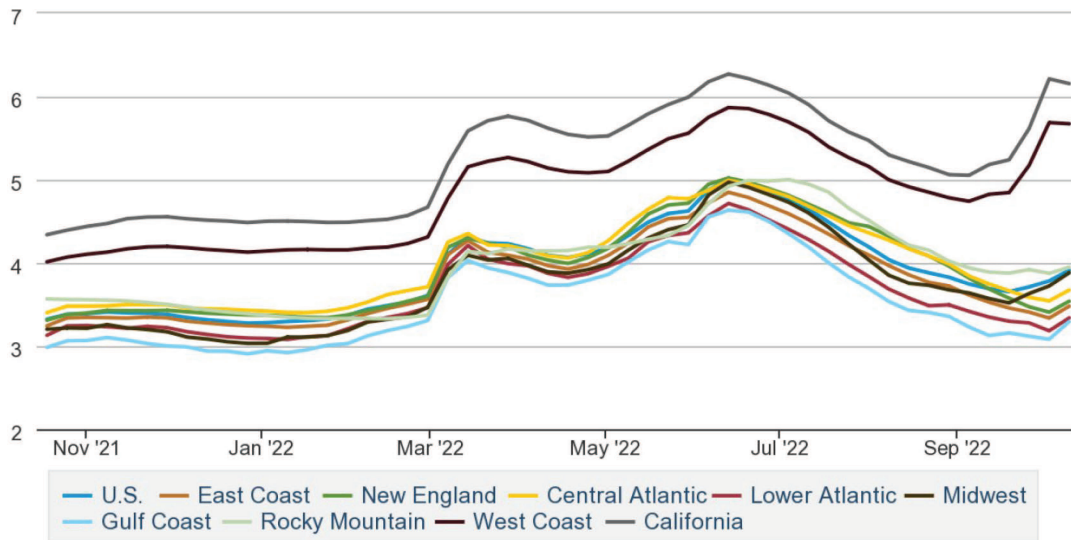


Figure 2: Regular Gasoline Price in USA

Data Sources: <https://www.eia.gov/petroleum/gasdiesel/>

countries implement a temporary windfall tax, which ranges from 25% (i.e. UK) to 90% (i.e. Greece). The Governments hope to collect more tax from high profit companies and then redistribute to vulnerable energy users. Since the windfall tax may incur some negative side effects, the European Commission has issued guidance for helping better design of temporary windfall profits tax. IMF (2022) also addressed several recommended guidelines such as a permanent tax from fossil fuel extraction, reducing investor risk, switching to renewable energy, and the clear measure of excess profit for implementing the windfall tax.

Freezing the Market Price May Be Another Good Option

The levy of windfall tax aims to alleviate the rising energy cost pressure for the public. However, a poorly-designed tax may discourage energy investment and bring more harm to the public. Rather than focusing on the windfall tax, this author suggests that freezing the market price may be another good option. From

the implement cost view, the levy of windfall tax costs more, while, from the experience in Taiwan, freezing the market price has the lowest administration costs, less uncertainty (e.g. freezing price as price up to a certain level), can be implemented quickly, is more flexible (e.g. freezing the price for the poor household) and definitely a temporary policy. If all the government, energy investors, and the public have consensus for helping vulnerable energy users in the

worst crisis period, then we just freeze the market price in the worst period. Once the crisis has passed, the economy system just goes back to the normal track, the government will have sufficient money to pay back compensating firms' loss due to the freezing policy.

Since the climate change issue is getting worse, and the world financial market is becoming more volatile, the scenarios of market failure resulting from sudden and great impacts should come out more frequently. The liberalization market system would be more difficult to operate. Freezing the market price temporary may be a good option to handle the unexpected giant shocks.

Reference

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