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On the OPSF and the Downstream Oil Industry Deregulation: Lead Us Not into Reversal Temptation and Deliver Us from Obfuscation

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Abstract

The recent calls for the revival of the Oil Price Stabilization Fund (OPSF) is tantamount to a call for policy reversal, that is, reversal of the downstream oil industry deregulation that began in 1998. The history of the OPSF presents important lessons for policymakers. Petroleum price setting by fiat and using a price stabilization fund to smooth the price resulted in mismatches between payments to the fund and claims against it. The general public then ended up subsidizing oil consumers through subsidies from the national budget. When faced with political pressures, policymakers also lacked discipline in sticking to the price stabilization purpose of the OPSF, as demonstrated by the failure to implement the increase in the regulated price when the magnitude was large and by the use of the fund for something not directly related to price stabilization. Settling the legal challenges to OPSF credits and payments with finality also took time. Price distortion also resulted in cross-subsidization that created mismatches between demand and environmental objectives. Although there remain a few countries that have price stabilization funds, all of them are finding it hard to sustain funds operation and dealing with large deficits. Besides, the general direction of reforms globally is to remove fossil fuel subsidies.

Therefore, rather than policy reversal, reform durability should be pursued. Although the present oil crisis triggers questions on downstream oil industry deregulation, this should be seen as an opportunity to lock in reforms through a dedicated communication campaign that protects the public from disinformation and enables them to understand the premise in and the promises of the deregulation. Policymakers can also make additional commitments to stay the course through legislative amendments and supplemental issuances that cement and improve, rather than reverse, the reforms. Among the proposed legislative amendments, the ones that aim to strengthen and improve the deregulation law are the proposals on minimum inventory requirement and retail price unbundling. Having a strategic oil reserve also deserves examination, which, if proven feasible and affordable, should be viewed as strictly a buffer during instances of severe oil supply disruption rather than as a regular price stabilization tool. Lastly, having targeted assistance programs that facilitate direct income transfer to the poor is preferable to the OPSF and implementing these effectively is also a way to lock in reforms.

Keywords: Oil Price Stabilization Fund, oil price regulation, downstream oil industry deregulation, policy reversal, oil crisis, targeted assistance, fossil fuel subsidies, price unbundling, oil stockpiling, strategic oil reserves

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On the OPSF and the Downstream Oil Industry Deregulation: Lead Us Not into Reversal Temptation and Deliver Us from Obfuscation

Adoracion M. Navarro*

1. Introduction

The recent oil price spikes due to Russia's invasion of Ukraine have resulted in large increases in the domestic prices of petroleum products and have been hurting Filipino consumers. As of April 26, 2022, the year-to-date net increases in domestic prices are PHP18.45 per liter for gasoline, PHP31.45 per liter for diesel, and PHP25.05 per liter for kerosene (Department of Energy (DOE) 2022). Calls for policy responses followed especially during the election campaign season, when the calls were amplified and the revival of the Oil Price Stabilization Fund (OPSF) became part of the election platforms of certain candidates.[1] This call for the revival of the OPSF is worrisome as it implies a reversal from the current deregulation policy regime to a highly regulated one. Price stabilization under an OPSF-like mechanism means the government will intervene and set prices that are stable or fixed during the regulatory price reset period (such as every two months when the OPSF was still in place).

The temptation to reverse the downstream oil industry deregulation is partly due to pressures from populist demands. But when the OPSF revival is promised with unexamined premise, politicians also obfuscate. This paper therefore traces the history of the OPSF to contextualize why it was abolished and the downstream oil industry deregulated. It also explains the struggles of the few countries that still have a similar fund, argues against backsliding on reforms, and proposes alternatives to the policy reversal.

2. The historical context

Tracking the history of the OPSF (see Box 1) should start not in 1984 when the fund was officially created but in 1971 when Republic Act (RA) 6173 regulated the downstream oil industry and created the OPSF's predecessor, simply dubbed in RA 6173 as a "Special Fund". Before 1971, a free market existed in the downstream oil industry, that is, there was freedom of entry and exit by firms and price was not regulated by the government. At the time, four firms engaged in crude oil refining (viz., Shell, Caltex, Bataan Refining Company, and Filoil Refining) and six firms marketed petroleum products (viz., Esso, Filoil, Caltex, Getty, Mobil and Shell) (Supreme Court 1997). RA 6173 then declared regulation as a national policy in the petroleum industry and established the Oil Industry Commission to regulate the domestic prices, among other powers. Note that oil crisis was not a motivation in the move to regulate because this happened before the

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[1] At least two presidential candidates and one senatorial candidate stated during the campaign period the need to revive the OPSF as a policy response (see Ombay (2022), Remitio (2022) and The Bohol Times (2022)).

1973 oil crisis, the first oil shock of the 1970s, which began when the Organization of Arab Petroleum Exporting Countries cut their production in October 1973 and declared oil embargo against countries that supported Israel in the 1973 Arab-Israeli war.

Box 1. Relevant legal issuances, executive issuances, and jurisprudence

Legal issuance/Executive issuance/Jurisprudence	Relevance
RA 6173 (enacted in 1971) - An Act Declaring a National Policy on the Petroleum Industry, Regulating the Activities and Relations of Persons and Entities Engaged Therein, Establishing an Oil Industry Commission to Effectuate the Same, and Defining its Functions, Powers and Objectives, and for Other Purposes	This law established the Oil Industry Commission, which regulated the domestic prices of petroleum products, among other powers. Section 8 (as amended by PD 389-A on February 14, 1974, PD 429-A on April 6, 1974 and PD 456 on May 14, 1974), created a Special Fund for projects and activities related to oil consumption, including subsidizing petroleum importation whenever there is a supply shortage. The law also directed that payments to the Special Fund be made by local oil companies whenever the international price would result in extraordinary gains from their existing inventories.
Letter of Instructions (LOI) No. 842, series of 1979	This LOI recognized the necessity of reimbursing oil companies of cost increases due to the Organization of Petroleum Exporting Countries (OPEC) members' successive price adjustments since December 1978 and for this purpose, directed the release of PHP225 million from the Special Fund.[a]
LOI 1335 s. 1983 - Rationalizing and Regulating the Operation of the Oil Industry	This LOI declared that the Consumer Price Equalization Fund instituted under LOI 842 s. 1979 "has eroded to the point that it is no longer able to serve its basic purpose of protecting consumers against the uncertainties of the international energy picture" (par. 5) and abolished the Fund by repealing LOI No. 842. It also mandated the Board of Energy to implement an automatic adjustment mechanism for the regulated oil companies such that the prices reflect market forces but the profits do not exceed a reasonable rate of return on investment.
Presidential Decree (PD) 1956 (decreed in 1984) - Imposing an Ad Valorem Tax on Certain Manufactured Oils and other Fuels, Bunker Fuel Oil and Diesel Oil; Revising the Rates of Specific Tax Thereon; Abolishing the Oil Industry Special Fund; and for Other Purposes	This law imposed additional taxes on different oil products, abolished the Special Fund created through RA 6173 as amended, and created the Oil Price Stabilization Fund (OPSF) with funding from the additional taxes. The OPSF aimed to absorb international price fluctuations or achieve price stability in the domestic market for petroleum.

Legal issuance/Executive issuance/Jurisprudence	Relevance
LOI 1431 s. 1984	This LOI allowed the use of the OPSF for reimbursing oil companies due to fluctuations in foreign exchange rates.
LOI 1441 s. 1984	This LOI directed the Board of Energy to review and reset prices for petroleum products every two months, with the increase or decrease in the OPSF impost component aiming to maintain a balance between the revenues of and the claims against the OPSF.
LOI 1460 s. 1985	This LOI reiterated the price stabilization purpose of the OPSF and directed the Board of Energy to ensure payment to the OPSF the cost savings enjoyed by oil companies due to changes in the international prices of oil, foreign exchange rates, or ad valorem tax.
Executive Order (EO) 137 s. 1987 - Expanding the Sources and Utilization of the Oil Price Stabilization Fund (OPSF) by Amending Presidential Decree No. 1956	This law[b] expanded the sources of the OPSF by including the cost differentials in cases when the oil companies' actual import costs were less than the computed costs fixed by the Board of Energy. The Order also expanded the utilization of the OPSF by allowing oil companies to be reimbursed for their cost underrecoveries due to reduction of domestic petroleum prices.
EO 172 s. 1987 - Creating the Energy Regulatory Board	This law[c] reconstituted the Board of Energy into an independent Energy Regulatory Board and mandated the Board to regulate the market for energy resources. It also put the reconstituted Board in charge of the OPSF.
RA 6952 (enacted in 1990) - An Act Establishing the Petroleum Price Standby Fund to Support the Oil Price Stabilization Fund (OPSF), and Appropriating Funds therefor	This law appropriated PHP5 billion to support the OPSF and called the funding support the Petroleum Price Standby Fund. The standby fund was meant to settle reimbursements to oil companies for transactions up to November 30, 1989, provided that the return on investment did not exceed twelve percent.
RA 7639 (enacted in 1992) - An Act Providing for the Payment in Part of the Subscription of the National Government of the Republic of the Philippines to the Capital Stock of the National Power Corporation Out of the Oil Price Stabilization Fund, Amending for the Purpose	This law allowed the national government to pay part of its capital stock subscription in the National Power Corporation using the OPSF. The law authorized the release of PHP3 billion pesos out of the OPSF for the capital stock subscription, provided that the Fund still has such amount and that the capital stock financing will be used for energy projects only.

Legal issuance/Executive issuance/Jurisprudence	Relevance
Presidential Decree No. 1956, as Amended	
RA 8180 (enacted in 1996) - An Act Deregulating the Downstream Oil Industry, and for Other Purposes	This law deregulated the downstream oil industry in two phases, with phase 1 or partial deregulation for the lifting of non-pricing controls and phase 2 or full deregulation for the removal of price controls, the use of an automatic oil pricing mechanism to promptly reflect international prices, and the abolition of the OPSF. The law provided a transition arrangement for such abolition, including the keeping of PHP1 billion buffer fund for the settlement of outstanding claims against the OPSF and the transfer of its balance, if any, to the General Fund of the national government.
EO 392 s. 1997 - Declaring Full Deregulation of the Downstream Oil Industry	This executive issuance enumerated the events that had transpired and the conditions for full deregulation that had been satisfied, and then declared the full deregulation of the downstream oil industry by February 8, 1997.
G.R. No. 124360 November 5, 1997, Tatad vs. Department of Energy and Department of Finance, G.R. No. 127867 November 5, 1997, Lagman et al. vs. Torres et al.	Given that the constitutionality of certain provisions of the 1996 deregulation law and EO 392 s. 1997 was assailed before the Supreme Court (SC), the SC ordered the maintenance of status quo on October 7, 1997. On November 5, 1997, the SC resolved that the provisions of the law on tariff differential, inventory requirement, and predatory pricing do not meet fair competition standards and ruled that RA 8180 is unconstitutional and EO 372 s. 1997 void.
RA 8479 (enacted in 1998) - An Act Deregulating the Downstream Oil Industry, and for Other Purposes	This law reinstated the path toward deregulation of the downstream oil industry and addressed the unconstitutional provisions in RA 8180 by providing a uniform tariff duty of three percent, not requiring a minimum inventory for firms, and providing anti-trust safeguards in the market for petroleum.

Notes:

[a] The reimbursement mechanism through the Special Fund was eventually called the Consumer Price Equalization Fund although it was not named as such in LOI 842 s. 1979.

[b, c] These executive orders are considered laws because these were issued before the legislative power of then President Corazon Aquino under the provisional 1986 Freedom Constitution (which allowed the President to exercise both executive and legislative powers until a legislature was elected under a new Constitution) reverted to Congress. The Filipino people ratified a new Constitution on February 2, 1987 and elected the members of the 8th Congress (taking off from the last pre-Martial law Congress, the 7th Congress under the 1935 Constitution) on May 11, 1987.

The Special Fund in RA 6173, which became known in later documents as the "Oil Industry Special Fund," had broad uses, such as for projects related to oil consumption, exploration, project development, and research. But it was also used in profit regulation by extracting from petroleum companies payments to the Special Fund whenever they obtained extraordinary gains from their inventories due to international price movements. It was also used in price stabilization by subsidizing the oil importation of government entities[2] to ensure adequate supply at regulated prices. Price stabilization through this mode ran into trouble, such as when successive price spikes occurred in 1979 or the second oil shock of the 1970s, which was precipitated by the Iranian Revolution that began in 1978. LOI 842, s. 1979 had to carve out a "Consumer Price Equalization Fund (CPEF)" of PHP225 million (equivalent to PHP5.03 billion at present) from the Oil Industry Special Fund to reimburse local oil companies for the successive cost increases and maintain domestic prices at levels lower than what were dictated by market forces. But in 1983, LOI 1335 declared that the CPEF had eroded to the point that it could no longer protect consumers from price increases. LOI 1335, s. 1983 then abolished the CPEF and directed the regulator at the time, the Board of Energy, to let prices adjust based on actual costs and market forces but capped based on rate of return regulation. The abolition of this mechanism for price stabilization by reimbursing companies for cost increases, however, was very temporary because in 1984, the OPSF was formally created.

In 1984, Presidential Decree (PD) No. 1956 imposed ad valorem taxes and revised specific taxes on oil products to help the cash-strapped and heavily indebted government raise additional revenues. The Philippine government found it difficult to secure additional borrowings for financing its fiscal deficit as it had not been immune to the loss of confidence in indebted developing countries during the 1980s international debt crisis. The debt crisis began with the 1982 debt repayment default by Mexico and deepened as the developing countries' indicators of ability to pay debt (including corruption record) came under closer scrutiny by the international banking community and creditor countries.[3] PD 1956 recognized that the country was in a crisis and directed that all proceeds from the ad valorem tax shall accrue to the national government's General Fund. It then created under the General Fund a special account called the "Oil Price Stabilization Fund" or the OPSF. It also abolished the Oil Industry Special Fund and declared the OPSF as the mechanism for "minimizing frequent price changes", that is, stabilizing the prices of petroleum products. Contributions to the OPSF came from the increase in ad valorem taxes and customs duties on petroleum products and the increase in tax collection due the lifting of tax exemptions on government corporations. The decree also provided that any additional tax to be imposed on petroleum products shall accrue to the OPSF.

PD 1956 also directed that the OPSF be used to reimburse oil companies for import cost increases due to exchange rate adjustments and world price movements. The country had just emerged from a fixed exchange rate policy and was under a "managed floating" exchange rate policy in 1984

[2] Specified in the law as "government agencies, or government-owned or -controlled corporations" (RA 6173, Section 8, item j).

[3] For a briefer on the 1980s debt crisis, see World Bank (1993). For an example of literature on the Philippine experience during the 1980s debt crisis, see Dohner and Intal (1989a and 1989b). In the case of the Philippines' indebtedness, the rapid accumulation of foreign debt occurred during Martial Law, with total foreign debt nearly tripling between 1974 and 1978. Capital flight was happening at the same time, with the net outflows between 1971 to 1980 equivalent to about one-third of the increase in total external indebtedness (Dohner and Intal 1989a). A domestic financial crisis was also happening, as many firms that were unable to access long-term funds relied on short-term credit roll-overs. "Particularly affected were conglomerates owned by several of the Marcos cronies" (Dohner and Intal 1989b, p.497). When these firms failed and the government decided to bail them out, external borrowings accelerated further and total foreign debt almost doubled between 1979 and 1982 (Dohner and Intal 1989a).

(Bautista 2003) and thus LOI 1431 s. 1984 was issued to clarify the use of the OPSF in reimbursing the additional importation costs of oil companies due to fluctuations[4] in foreign exchange rates. LOI 1441, s. 1984 was also issued to set the price smoothing every two months.

The OPSF design underwent changes. In 1985, LOI 1460 directed that oil companies' cost savings due to market forces and ad valorem tax changes be contributed to the OPSF. In 1987, EO 137 expanded the sources of the OPSF by directing that positive cost differentials between the costs fixed by the regulator and the actual import costs by the oil companies be contributed to the OPSF. It also expanded the utilization of the OPSF by directing that the reimbursables include the under-recoveries of oil companies during the regulatory reset periods.

One of the disappointing experiences in the petroleum price setting by fiat and using a price stabilization fund to smooth the price is the occurrence of mismatches between payments to the fund and claims against it. This meant that the general public ended up subsidizing oil consumers through subsidies from the national budget. RA 6952 passed in 1990 basically did that, as the law appropriated a PHP5 billion (equivalent to PHP25.59 billion at present) "Petroleum Price Standby Fund" to augment the OPSF and settle claims against it that had accumulated up to November 30, 1989.

Another unsatisfactory experience is the lack of discipline by policymakers in sticking to the price stabilization purpose of the OPSF. In 1992, legislators allowed the use of the OPSF for something not directly related to price stabilization—the payment of capital stock subscription in a government corporation in the energy sector. RA 7639 was enacted to authorize the withdrawal of PHP3 billion (equivalent to PHP11.84 billion at present) from the OPSF and the use of this amount to partly pay for the national government's capital stock subscription to the National Power Corporation.

The lack of political will to implement price increases when the magnitude was large also contributed to the erosion of the OPSF. It even came to a point when the government gave in to political pressures to roll back price increases, such as what happened in February 1994 (International Monetary Fund (IMF) 1995).

The lengthy settlement of legal challenges to OPSF credits and payments also made the picture of the OPSF financial position murky. For instance, the 1991 claim by the government on Shell's underpayment of contributions and the government's subsequent imposition of surcharge against Shell was settled with finality only in 2008. After back-and-forth claims and counterclaims between the government and Shell since 1991, Shell contested the surcharge before the Court of Appeals in 2004, then the Court of Appeals ruled in favor of Shell, then the DOE filed a petition for review on certiorari before the Supreme Court in 2006, and finally, the Supreme Court ruled in 2008 that the DOE petition is without merit (Supreme Court 2008).

An additional price distortion created during the OPSF days is that the regulated price for premium gasoline was set higher than the computed price in order to keep the price of diesel low. In effect, cross-product subsidization was implemented by the regulator. Purportedly, this is to support the consumers of diesel such as those using public transportation vehicles, delivery trucks, fishing

[4] As opposed to adjustments, which were the case under the fixed and managed floating exchange rate regimes.

boats, farm machinery, and others. But this had the unintended result of encouraging shift in diesel fuel use and higher consumption of a type of fuel that emits more carbon (Caparas 2000; Mendoza 2014). The cross-subsidization also created mismatches between user demand and the capacity of oil refineries (IMF 1995).

As policymakers eventually realized that operating the OPSF can no longer be sustained and the Philippine oil industry needed investments and services greater than those being provided by the "Big Three" oil companies (Petron, Shell, and Caltex), RA 8180 was enacted in 1996 to deregulate the downstream oil industry. However, the Supreme Court ruled in 1997 that RA 8180 was unconstitutional and voided the effect of EO 392 s. 1997 that declared the full deregulation of the industry. The Supreme Court found that the provisions in the law on four percent tariff differential between imported crude oil and refined petroleum products and the minimum inventory requirement for oil companies serve as significant barriers to entry and the definition of predatory pricing does not provide enough protection against anti-competitive behavior (Supreme Court 1997).

Congress then immediately remedied the unconstitutional provisions and enacted a new deregulation law, RA 8479, in 1998. RA 8479 addressed the constitutionality issue by: (a) providing an equal tariff treatment for imported crude oil and refined petroleum products by setting a uniform three percent tariff rate; (b) removing the minimum inventory requirement but still requiring petroleum companies to submit monthly reports on inventory and other related items; and (c) clarifying the definition of predatory pricing as purposely destroying competition or discouraging potential competition. Finally, the deregulation law abolished the OPSF by repealing PD 1956 that created it, provided an automatic oil pricing mechanism that is dictated by market forces, and set all outstanding claims against the OPSF as accounts payable of the national government.

3. The struggles of the few that remained

In general, the removal of subsidies for fossil fuels, including those present in price stabilization funds, has been the direction of reforms in oil-importing countries. But there remain a few net importers of oil where fossil fuel price stabilization funds are still operational. These are Thailand, Vietnam, Malawi, and Chile, [5] and they are encountering challenges in sustaining the operation of these funds or often dealing with large deficits.

Thailand established its oil fund in 1979 (Vikitset 2014). In 1991, price regulation was lifted for most products except liquefied petroleum gas (LPG) (International Business Times 2011). But the coverage of the oil fund was expanded again through legislations in 2004 and 2019 (Petroleum Institute of Thailand 2019). Now known as the Oil Fuel Fund, it has performed its function of stabilizing prices but at a high fiscal cost because it has always been in deficit. As of March 24, 2022, the Oil Fuel Fund is incurring loans of THB20 million from commercial banks to support

[5] Rigorous research was undertaken to come up with a well-informed listing of these countries. Research strategies included the use of translation of national laws to English. Any country missed is likely due to limitations in accessing national information resources. Net oil exporting countries that have oil price stabilization funds are excluded in the list for an obvious reason: they have the means, their petroleum-based earnings, to fund the price stabilization.

the Russian invasion- triggered spikes in subsidies, that is, by repaying oil and gas companies for capping diesel prices and fixing LPG prices (Praiwan 2022). The persistent deficits stir up previous calls for reforms, such the recommendation of the Asian Development Bank (ADB) in 2015 to phase out the subsidies and replace these with targeted transfers for the poor (ADB 2015).

In Vietnam, the petroleum industry is one of the subjects of transition under the "Doi Moi" campaign (i.e., set of reforms for transforming the Vietnamese economy from a centrally planned one to a market-oriented socialist economy) that started in 1986. With the gradual increase of petroleum industry participants came the need for regulatory measures, until 2009 when the socialist government passed Decree No. 84/2009/ND-CP regulating the domestic market for petrol and setting aside what it called price valorization funds (National Assembly of the Socialist Republic of Vietnam 2009). Set up as accounts of domestic petroleum product producers, the funds are now called price stabilization funds. Although prices had been stable in the early years of price stabilization implementation, price increases have recently been allowed due to demand and supply pressures. The demand pressure is due to Vietnam's economic growth that is pulling the long-term demand growth for petroleum, and the supply pressure is a short-term one as it is due to COVID-19 pandemic-induced supply restrictions (Minh 2021). The Russia-Ukraine war now exacerbates the price increase pressures. Initially, the balance of the funds was positive (e.g., VND 1,800 billion in 2010 and VND1,500 billion in 2011), but has fallen in 2013 (to around VND 59 billion) until it registered a negative balance (of VND 600 billion) in 2021 (Minh 2021).

Malawi has a fairly young price stabilization fund, which was established in 2004 when its legislature passed the Liquid Fuels and Gas (Production and Supply) Act (Malawi National Assembly 2004). But the fund mechanism was reported to be impotent in stabilizing oil prices (Nkawihe 2016) and preventing oil supply shortages (Mianjira 2022). Consumers also criticized the use of the fund for other purposes, such as for purchasing maize in 2016 (Nkawihe 2016). Through specific levies, consumers partly pay for the price stabilization fund and programs on road rehabilitation, rural electrification, and petroleum quality assurance. But recently, consumers have called for the abolition of these levies due to the failure of government institutions to do their mandates and implement programs that are supposed to justify the levies (Mianjira 2022).

In Chile, price stabilization funds started in 1991 but most of these had already been abolished. What is left is only very small and dedicated for household consumed kerosene (Kojima 2016). The 2014 law which repealed the price stabilization mechanism also abolished certain taxes that were used for it (National Congress of Chile 2014). At first, the price stabilization funds for oil products helped mitigate drastic price increases, especially for retail gasoline. But funds depletion was always a problem, and even necessitated the transfer of money from other funds such as in 2008 when USD7 billion of copper funds were transferred to the oil fund (Kojima 2016).

4. A highly recommended strategy: Lock in reforms

Locking in reforms is a highly recommended strategy for ensuring reform durability and removing the temptation for policymakers to backslide. As the present oil crisis triggers questions on downstream oil industry deregulation, this should be seen as an opportunity to lock in reforms through a dedicated communication campaign that protects the public from disinformation, and prevents them from misunderstanding the premise in and misinterpreting the promises of the deregulation. Policymakers can also make additional commitments to stay the course through legislative amendments and supplemental issuances that cement and improve, rather than reverse, the reforms.

4.1 The premise in and promises of deregulation

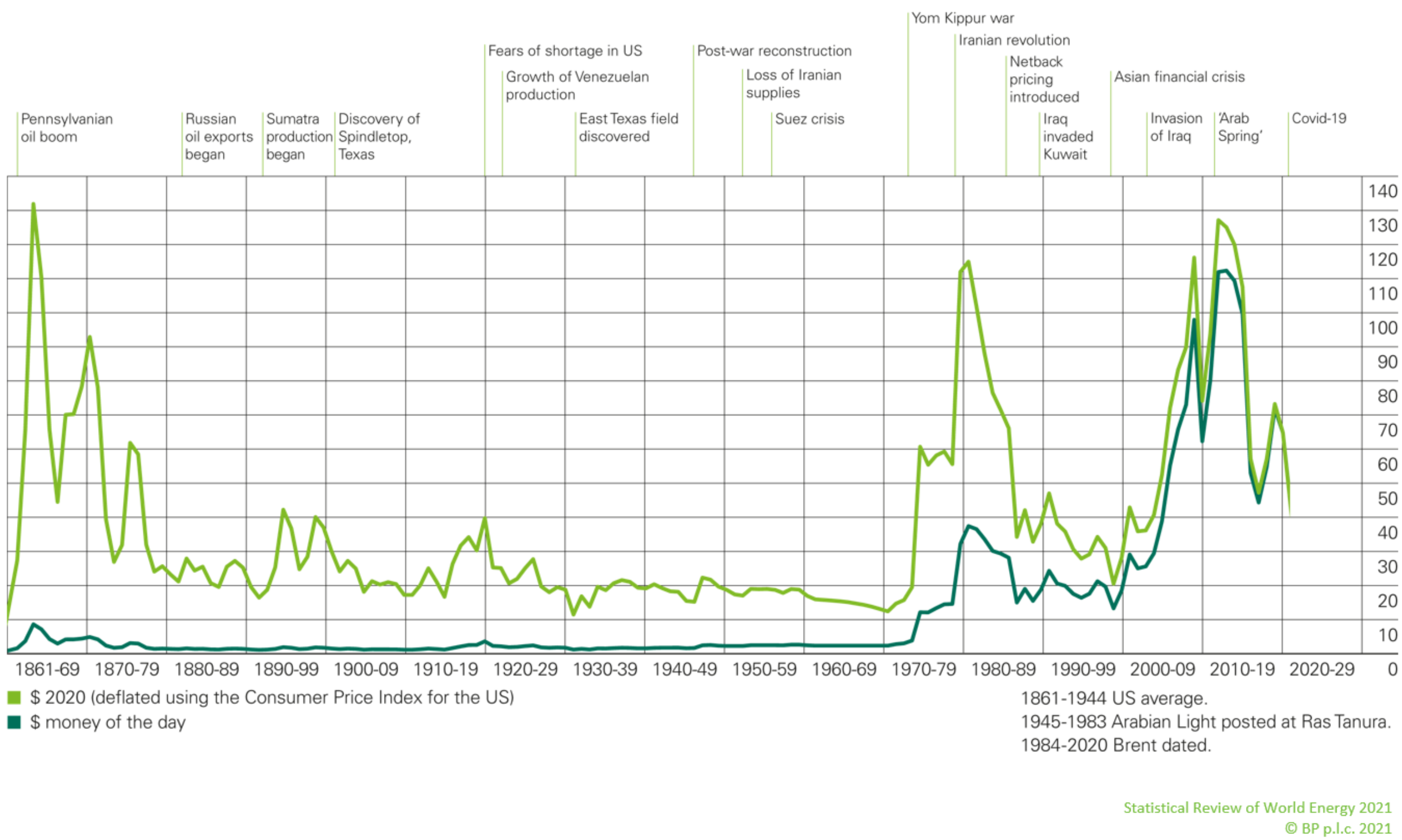
The periods when there were sustained oil price surges in the world market had often become an occasion for those calling for the repeal of the downstream oil industry deregulation to make some noise. One can see this by revisiting the local news in 2008 when speculative bubble was building up, in 2011 when supply shortages occurred due to the Arab Spring movements, in 2017-2018 due to the high demand growth (prior to the oil crash), in October 2021 due to the sudden jump in global demand when COVID-19-induced mobility restrictions were relaxed, and recently due to the Russia-Ukraine war. This suggests that the premise in the downstream oil industry deregulation is not well understood.

One premise is that price regulation is not effective because for net oil importing countries with a small share in the global market like the Philippines, market forces in the local downstream oil industry are primarily influenced by external events. As can be seen in Figure 1, external events that led to price spikes and crashes are usually major world events.[6] Small importers are simply too small to influence the impacts of these major events on the market price. That is why domestic price regulation is difficult and defending misaligned prices is costly. The deregulation policy is meant to avoid the cost of defending misaligned prices.

Another premise is that there are less distortionary and more effective instruments for mitigating the adverse consequences of high world prices. Examples are targeted subsidies for the vulnerable sectors, demand management, and strategic stockpiling. What is needed therefore is to accept that it is better to let market forces prevail and search for effective mitigating measures.

[6] The nominal prices in the BP p.l.c. graph in Figure 1 are the series with label "$ money of the day" and the real prices are the series with label "$ 2020 (deflated using the Consumer Price Index for the US)." The graph has not yet captured the most recent crisis due to Russia's invasion of Ukraine. The international benchmark, Brent crude oil price, peaked on March 8, 2022, twelve days after Russia invaded Ukraine. The spot price jumped to $132.75 per barrel during the trading session, a figure last seen during the July 2008 oil shock, before closing at $123.21 to a barrel (Stevens, P. 2022. Crude oil jumps as much as 7% on U.S. ban of Russian imports, but trades off session highs. CNBC, March 8, 2022. https://www.cnbc.com/2022/03/08/americans-are-paying-the-most-at-the-pump-on-record-amid-a-surge-in-energy-prices.html). It peaked again on May 30, 2022 to $120 per barrel, buoyed by high demand due to the re-opening of Chinese cities subjected to COVID-19 restrictions (Wallace, J. 2022. Oil Prices Top $120 as China Eases Lockdowns. The Wall Street Journal, May 30, 2022. https://www.wsj.com/articles/oil-prices-hit-two-month-high-as-china-eases-lockdowns-11653933068).

Figure 1. Nominal and real prices of crude oil (US$ per barrel) amid significant world events, 1861-2020

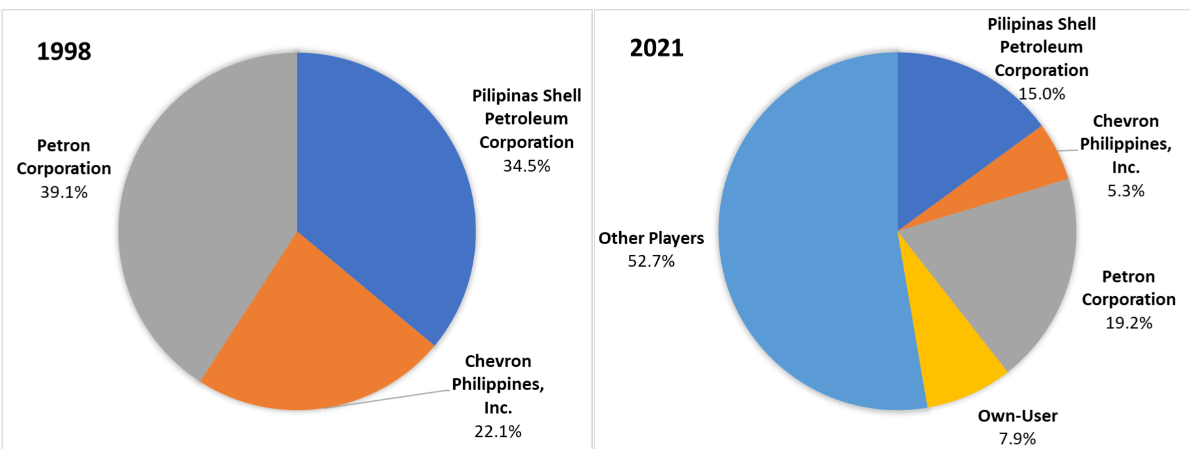


Source: BP p.l.c. (2021, p.7).

Public transport and consumer groups as well as left-leaning legislators also argue that the deregulation law has been ineffective in protecting consumers from high price increases. This amounts to a misunderstanding of the promises of the deregulation. The deregulation law did not promise to lower prices or stop price increases, rather, it set as a policy goal "a truly competitive market under a regime of fair prices" (RA 8479, Section 2). Fair prices means not unfairly high for the benefit of producers and to the detriment of consumers, nor unfairly low that needed subsidizing to the detriment of non-consumers of oil. A competitive market is needed to attract more investors willing to improve the quality of petroleum products and expand their coverage to serve underserved areas, especially island provinces and municipalities.

Greater competition in the market has been achieved. Prior to the 1998 deregulation, the major market players in the downstream oil industry consisted of Petron (owned then by the Philippine National Oil Company (PNOC), a government corporation), Shell, and Caltex (owned by Chevron Philippines, Inc.), or the so-called "Big Three" in the industry. Twenty-three years after the deregulation, 400 firms are participating in the industry with a cumulative investment of PHP209.59 billion as of December 2021 (DOE-Oil Industry Management Bureau (OIMB) 2022a). Moreover, Petron has since been privatized and the market share of the "Big Three" has significantly declined, from 95.7 percent in 1998 to 49.4 percent in 2021 (see Figure 2). Other popular albeit small players (with market shares ranging between 7 to 3 percent) are Phoenix, Unioil, Insular Oil, Seaoil, and Liquigaz (DOE-OIMB 2022b).

Figure 2. Philippine petroleum product market shares, 1998 vs. 2021



Source: DOE-OIMB (2022b)

On fair pricing, the government through the DOE is responsible for monitoring this. Three independent reviews have so far been conducted to assess the implementation of the downstream oil industry deregulation law including fair pricing. The first review was conducted in 2005 by an independent review committee formed by the DOE. It found no evidence of cartel behavior and argued that prices at the pump tend to be identical across stations because of near homogeneity of the products. The second review was jointly conducted in 2008 by the DOE, the SGV (an accounting firm), and the University of Asia and the Pacific. It deduced that the profits of oil companies declined since deregulation because the increase in domestic prices were not as fast as world prices. The third review, conducted in 2012, was by another DOE-formed independent review committee. Among other findings, it found reasonable margins for local oil companies. In the case of the three major companies, the average return on equity (ROE) was lower after the deregulation; ROE was 23.3 percent during the 1994-1996 period and 13 percent during the 1998-2011 period (Mendoza 2014).

4.2 Possible policy responses

Among the proposed legislative amendments, the ones that aim to strengthen and improve the deregulation law are the proposals on minimum inventory requirement and retail price unbundling (e.g., House Bill 10823[7] in the 18th Congress). A separate executive proposal that deserves examination is having government-owned strategic oil reserves as part of the country's oil contingency plan, which can be activated during severe oil supply disruptions.

Recall that the Supreme Court declared in 1997 the minimum inventory requirement (MIR) in the first deregulation law as unconstitutional because it violates free competition. The DOE as respondent in the case averred that the MIR (10% of annual sales or 40 days supply, whichever is lower) aims to guarantee continuous domestic supply and discourage fly-by-night operators. The Supreme Court's reasoning at the time was based on the advantage enjoyed by Petron, Shell and Caltex for having storage facilities. The justices argued that prospective competitors "will find compliance with this requirement difficult as it will entail a prohibitive cost" (Supreme Court 1997, 51st paragraph).

Note, however, that the current environment is markedly different from what the Supreme Court appreciated in 1997. The local petroleum industry is now marked by greater competition and the DOE, in aiming for energy security, is already implementing the MIR via department circulars. The MIRs are as follows: 30 days of supply for refiners; 7 days of supply for LPG suppliers; and 15 days of supply for all other oil companies and bulk suppliers (DOE DC 2003-01-001 and DOE DC 2011-03-0002). The legislative amendment will therefore institutionalize the existing practice. What will have to be worked out is the to-be-legislated number of days of supply given that the proposed 30 days of supply for all refiners, importers, and bulk distributors is being opposed by the Independent Philippine Petroleum Companies Association on the ground that small industry players could not afford this (Crismundo 2022).

Retail price unbundling, as currently proposed in HB 10823, refers to the unbundling of petroleum prices to reflect the landed cost of crude oil or petroleum product and added costs such as port charges and other imposts, refining cost (for crude oil), storage cost, handling cost, marketing cost, and transshipment cost (HB 10823, Section 6). The DOE actually attempted to implement price unbundling in May 2019 through Department Circular 2019-05-008 but industry players raised that the circular runs contrary to the downstream oil industry deregulation law and sought

[7] House Bill submitted by the Committee on Energy of the House of Representatives on March 16, 2022 in substitution of House Bills numbered 10505, 4550, 4711, 5172, 5186, 7928, 8764, and 10386, and House Resolutions numbered 9, 390, and 1651.

injunctive relief from the courts. The regional trial courts of Taguig, Mandaluyong, and Makati granted preliminary injunctions on July 19, August 5, and August 14, respectively, in 2019.[8] Until now, the injunctions have not been lifted and the DOE is unable to exact compliance from industry players.

Consistent with the deregulation law, retail price unbundling will promote transparency and fair pricing. It should actually be welcomed by industry players interested in maintaining a level playing field as it would help spot anti-competitive practices such as predatory pricing, or even smuggling. But under the deregulation law, the DOE is only authorized to monitor domestic prices and world prices, which is in fact the argument of the opposing industry players that the courts already heard. Legislating retail price unbundling therefore will authorize the DOE to monitor also the components of the domestic prices of petroleum products. Nevertheless, policymakers also need to examine the claim of some industry players that the unbundling order will cause them to violate non-disclosure agreements in some of their supply contracts (Philippine Institute of Petroleum 2021) and see how this can be addressed through legislation design.

Let us now turn to strategic oil reserves. We can look at the experience of our Asian neighbors in having strategic oil reserves. Net oil importers Japan and South Korea, which are International Energy Agency (IEA) members, have oil stocks in both public and private ownership, with Japan's stockholding at a total of 219 days of imports and South Korea's at 183 days of imports as of end-2021. Note that the IEA requires all its members (whether net oil exporter or net oil importer) to hold emergency oil stocks of not less than 90 days of net oil imports (IEA 2022). Non-IEA members and big net oil importers China and India also hold strategic oil reserves. China's strategic oil reserve is state-owned and, based on 2017 data, it has nine major stockpiles across the country with a combined capacity of 37.7 million tons (Azeez 2021). India has a government-owned strategic petroleum reserve company, which owns three stockpiles in different locations with a combined capacity of 5.33 million tons (Mishra 2022). The Philippines' closer neighbors Thailand and Taiwan also have their own strategic oil reserves. Thailand maintains a strategic oil reserve through the oil companies, the largest of which is state-owned PTT Public Company Limited. The required level is not fixed and can be ordered reduced or increased depending on the needs of the times; for instance, a reduction during the COVID-19 pandemic (Praiwan 2020) and an increase recently due to the Russia-Ukraine war (The Nation 2022). The Petroleum Administration Act of Taiwan requires the government to maintain a strategic oil reserve of at least 30 days of average daily sales and consumption (Taiwan Research Institute 2018).

[8] To summarize, the following are the cases filed by the industry players and the legal status of each: (a) Philippines Institute of Petroleum, Inc., Isla LPG Corporation, PTT Philippines Corporation, and Total (Philippines) Corporation vs. DOE before the Makati Regional Trial Court (RTC) Branch 58 – case filed on June 21, 2019, temporary restraining order (TRO) issued on June 28, 2019, and writ of preliminary injunction granted on August 14, 2019; (b) Pilipinas Shell Petroleum Corporation vs. The Secretary of the DOE before the Taguig RTC Branch 70 – case filed on June 24, 2019, TRO issued on July 3, 2019, and writ of preliminary injunction granted on July 29, 2019; (c) Petron Corporation vs. DOE before the Mandaluyong RTC Branch 213 – case filed on June 25, 2019, TRO issued on July 15, 2019, and writ of preliminary injunction issued on August 5, 2019. The Court of Appeals affirmed on October 6, 2020 the Taguig City RTC's order (In discussion with Ms. Hideliza Ludovice of the DOE-OIMB on March 31, 2022).

The proposed strategic oil reserve for the Philippines is not yet articulated in the National Energy Plan, which was prepared in 2002,[9] but the broad outline of the proposal is that it will be stockpiled by the PNOC.[10] If such will be feasible and affordable, it should be viewed as strictly a buffer during instances of severe oil supply disruption rather than as a regular price stabilization tool. In that way, it will be consistent with the deregulation law that promotes private sector-led competition.

Oil stockpiling requires capital expenditure and yet on its own it does not generate profit. This is why some industry players are lukewarm to the idea of institutionalizing the minimum inventory requirement. Government participation in holding oil reserves may help generate industry consensus on compliance, as long as it is clear that the government-owned oil stocks are strictly for contingencies and not meant to compete with the private sector. After all, during oil supply disruptions, it is in everybody's interest to avoid economic losses and ensure a critical level of supply through an aggregate strategic reserve composed of government stockpile and industry-held stockpile.

5. Other ways forward

Another policy proposal that has emerged is fuel excise tax suspension, which, unfortunately, is another form of policy reversal—a fiscal reform policy reversal.[11] The Department of Finance (DOF) said that fuel excise tax suspension would result in fiscal revenue loss of PHP105.9 billion in 2022 (DOF 2022). Because the fiscal revenues have already been programmed to support the 2022 expenditures, this would affect the delivery of social services. Besides, any immediate relief from the tax suspension would benefit the rich more than the poor.

Table 1 below shows the fuel consumption of families by income decile as of the 2018 Family Income and Expenditure Survey. The fuel expenditure of the 20 percent richest families (whose incomes represent 48.80 percent of the total family income in the economy) is 50.61 percent or more than half of the total fuel family expenditure in the economy, while that of the 20 percent poorest families (whose incomes represent only 5.93 percent of the total family income in the economy) is only 4.06 percent of the total fuel family expenditure in the economy. Clearly, those who can very well afford fuel price increases will stand to benefit more from fuel price declines when fuel excise taxes are suspended. Because of this, targeted subsidies are preferable to fuel tax suspension.

[9] The National Energy Plan, a document which includes the National Oil Contingency Plan, is being updated, according to the DOE (In discussion with the DOE-OIMB on March 29, 2022).

[10] As of April 2022, the PNOC was preparing to hire an advisor for the needed feasibility study (In discussion with the PNOC on April 19, 2022).

[11] Staggered increases on fuel excise taxes from 2018 to 2020 are part of the measures under RA 10963 or the Tax Reform for Acceleration and Inclusion (TRAIN) law, which was enacted in 2017 to correct inequity in taxation and at the same time generate additional revenues for the government's infrastructure and social programs. Other measures include personal income tax exemption for those with taxable income below PHP250,000, reduction of income tax for majority of taxpayers, repeal of certain special laws on VAT exemptions, adjustment of automobile excise taxes, and, in support of health programs, introduction of excise tax on sweetened beverage and adjustment of the tobacco excise tax.

Table 1. Annual family mean income and fuel expenditure by income decile, 2018

Income Decile	Income		Fuel Expenditure		
	Mean Income (PHP)	Percentage Distribution (%)	Mean Fuel Expenditure (PHP)	Total Fuel Expenditure (million PHP)	Percentage Distribution (%)
1st Decile (Poorest 10%)	73,186.7	2.34	1,144.32	2,727.96	1.39
2nd	113,005.1	3.59	2,127.91	5,252.09	2.67
3rd	141,375.8	4.48	3,034.34	7,636.64	3.88
4th	170,617.8	5.41	4,040.73	10,087.19	5.13
5th	203,258.3	6.45	5,159.76	13,107.46	6.66
6th	243,225.0	7.71	6,327.45	15,786.33	8.02
7th	295,752.4	9.38	7,750.85	18,988.27	9.65
8th	373,828.1	11.85	9,716.05	23,599.41	11.99
9th	503,287.2	15.99	12,960.26	32,014.95	16.27
10th Decile (Richest 10%)	1,015,968.8	32.81	26,136.14	67,559.44	34.34

Note: Income deciles are based on the 2018 Family Income and Expenditure Survey (FIES)'s grouping of total family incomes into ten categories, ranked from lowest to highest. Fuel expenditures are based on liquid petroleum gas, kerosene, diesel, and gasoline consumption.

Source: Philippine Statistics Authority (2020).

Having an effective targeted subsidy program for those most affected by fuel price increases is also a way to lock in reforms. But there need to be improvements in the timing, coordination and efficiency in distribution as well as the generousness of the amounts. The fuel subsidy for the public transport sector and agriculture sector was not immediately implemented because of the election ban on public spending from March 25 to May 8, 2022. It took time for government agencies to coordinate with each other, to comply with rules, and decide on petitions. The Commission on Elections exempted the fuel subsidy program of the Land Transportation and Franchising Board from the ban only on April 6, 2022 (Pazzibugan 2022) and the fuel subsidy program of the Department of Agriculture only on April 27, 2022 (Cruz 2022). The government initially set the unconditional cash transfer for the 50 percent poorest families, which was touted as one of the ways to cushion the poor from the impacts of rising fuel prices, at PHP200 per family per month for one year, then changed this later to PHP500 per family per month for at least three months (Fernandez 2022). The generosity is uncertain because it is for a shorter duration and the decision to continue or revise this amount is up to the next administration.

Demand management program, such as through energy conservation activities and energy efficiency programs, can also help mitigate the impacts of oil price peaks. The Energy Efficiency and Conservation Act of 2019 (RA 11285) already lays down a comprehensive framework and set of rules for this. But the COVID-19 pandemic made private sector compliance with energy efficiency standards extra challenging as most firms need their funds to keep their businesses afloat (Business Mirror 2022). The government in collaboration with non-government advocacy groups and financing partners should therefore help facilitate the transition toward energy efficiency and the development of financing options.

Supply-side responses such as diversification of energy supply sources and development of our indigenous primary energy resources also deserve attention as these will reduce our reliance on imported oil over the medium to long term. Renewable energy investment is an important strategy in diversifying away from imported oil and there are already existing laws and rules for this. What needs to be improved is enforcement, such as supporting the electric power market with a reserves market that includes trading of ancillary services. On the exploration and development of our indigenous primary energy resources, these have always been part of the country's energy sector strategies and the Philippine Energy Plan 2020-2040 declared that "awarding of new service contracts and discovery of new oil and gas field in the near future shall be aggressively pursued" (DOE 2020, p. 48). But earnestness in plans must be matched by resoluteness in actions.

6. Last words on behalf of the poor

As we have seen from the analysis above, there are two major strands of policy thinking that are emerging now, namely, reinstate the OPSF (reversing the downstream oil industry deregulation in the process) and rewrite industry rules through such amendments as price unbundling and minimum inventory requirement. Policymakers should assess which of these is more tolerable for the industry players and will likely lead to better service quality, better coverage, and fair pricing. Industry players on the other hand should be interested in measures that will lead to reform durability rather than reform reversal.

More importantly, the effects on the poor should be well assessed by both policymakers and industry players so that previous and upcoming reforms would be acceptable. Sticking to adequate and quality service, fair pricing, and energy security as developmental objectives is good for the general population as these objectives will support economic growth and promote socioeconomic wellbeing. Pursuing these objectives in a way that does not burden the poor is better. We have seen from the history of the OPSF that this policy instrument did not deliver the objectives and the lengthy experiment with it even led to greater burden on the poor.

Reviving the OPSF will be anti-poor in at least three respects. First, price smoothing through the OPSF will not send the correct signal that consumers should reduce their consumption during seasons of very high international petroleum prices, and given that it is usually the rich who consume a higher volume of petroleum, the subsidy from the OPSF will disproportionately benefit the rich more than the poor. Second, based on the country’s experience, we have seen that the government is not good in getting the right smoothed price (e.g., the government cannot stick to the correct price when political pressures mount), managing the fund, and controlling the deficits of the fund. Reviving the OPSF will likely result in the national government having to bail out the special fund using the general fund, displacing funding for anti-poverty programs in the process. Third, as there are many players now in the downstream oil industry, unlike during the OPSF days when there were only the “Big Three”, administering the OPSF will be very costly, and the huge cost will be disproportionately borne by the poor, again because of the to-be-displaced funding for social programs for the poor. The likely delays in reimbursing oil companies may even reverse the competition gains in the medium to long run and discourage investments in expansion or encourage withdrawals of investments, thereby restricting access of the general population to competitively priced petroleum products.

Programs on targeted assistance to the poor is preferable to the OPSF. These will not result in price signal distortion in the downstream oil industry. These will result in less fiscal burden. These will facilitate direct income transfer to the poor.

Bibliography

Azeez, W. 2021. China is joining the US and other countries in tapping emergency oil reserves. *CNN Business*, November 25. https://edition.cnn.com/2021/11/23/energy/asia-uk-strategic-oil-reserves/index.html (accessed on March 20, 2022).

Bautista, R. 2003. Exchange Rate Policy in Philippine Development. PIDS Research Paper Series No. 2003-01. https://dirp3.pids.gov.ph/ris/rps/pidsrp0301.pdf (accessed on April 2, 2022).

BP p.l.c. 2021. Statistical Review of World Energy 2021. https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf (accessed on March 18, 2022).

Business Mirror. 2022. Energy efficiency, conservation remains a challenge for everyone, October 29. https://businessmirror.com.ph/2020/10/29/energy-efficiency-conservation-remains-a-challenge-for-everyone/ (accessed on March 30, 2022).

Caparas, M. 2000. Oil Deregulation. Economic Issue of the Day, Number 2, February 2000. Philippine Institute for Development Studies. https://dirp3.pids.gov.ph/ris/eid/pidseid0002.pdf (accessed on April 2, 2022).

Crismundo, K. 2022. P15-B add'l capital needed to import same volume of oil. *Philippine News Agency*, March 14. https://www.pna.gov.ph/articles/1169700 (accessed on March 20, 2022).

Cruz, RG. 2022. Comelec exempts DA, DOLE, Pagcor, PhilRice from election spending ban. *ABS-CBN News*, April 28. https://news.abs-cbn.com/news/04/28/22/comelec-exempts-da-dole-pagcor-philrice-from-election-spending-ban (accessed on April 29, 2022).

Department of Energy. 1998. Rules and Regulations Implementing Republic Act 8479, "Downstream Oil Industry Deregulation Act of 1998" (Department Circular No. 98-03-004). https://www.doe.gov.ph/laws-and-issuances/department-circular-no-98-03-004?withshield=1 (accessed on March 9, 2022).

———. 2020. *Philippine Energy Plan 2020-2040*. https://www.doe.gov.ph/sites/default/files/pdf/pep/PEP_2020-2040_signed_01102022.pdf (accessed March 16, 2022).

———. 2022. Oil Monitor as of 26 April 2022. https://www.doe.gov.ph/oil-monitor (accessed on April 30, 2022).

Department of Energy-Oil Industry Management Bureau (DOE OIMB). 2022a. Total Downstream Oil Industry (DOI) Cumulative Investment and Investments of New Players after R.A.

8479 (data file). Taguig City, Philippines: Department of Energy Central Office (accessed on April 6, 2022).

———. 2022b. Annex A - Total Country Petroleum Product Market Share (data file). Taguig City, Philippines: Department of Energy Central Office (accessed on April 5, 2022).

Department of Finance. 2022. DOF: Suspending fuel excise tax to benefit rich, not poor families, better to give P33-B cash aid to low-income, vulnerable sectors, March 16, 2022. https://www.dof.gov.ph/dof-suspending-fuel-excise-tax-to-benefit-rich-not-poor-families-better-to-give-p33-b-cash-aid-to-low-income-vulnerable-sectors/ (accessed on March 23, 2022).

Dohner, R. and Intal, P. 1989a. Debt Crisis and Adjustment in the Philippines. Chapter 8 in Sachs, J. (ed.). 1989. *Developing Country Debt and the World Economy*. Cambridge: National Bureau of Economic Research.

———. 1989b. The Philippine Financial System and the Debt Crisis. Chapter 5 in Sachs, J. and Collins, S. (eds.). 1989. *Developing Country Debt and Economic Performance, Volume 3: Country Studies - Indonesia, Korea, Philippines, Turkey*. Cambridge: National Bureau of Economic Research.

Executive Order No. 137, series of 1987. Expanding the Sources and Utilization of the Oil Price Stabilization Fund (OPSF) by Amending Presidential Decree No. 1956. Manila: Office of the President.

Executive Order No. 172, series of 1987. Creating the Energy Regulatory Board. Manila: Office of the President.

Fernandez, D. 2022. DBM earmarks subsidy of P500 monthly for 3 months, or P1,500 for poor families. *Philippine Daily Inquirer*, March 23. https://newsinfo.inquirer.net/1572362/dbm-earmarks-subsidy-of-p500-monthly-for-3-months-or-p1500-for-poor-families (accessed on March 30, 2022).

Hoffman, Sharon.1988. Philippines: Asia Pacific energy series (Country report). https://www.osti.gov/servlets/purl/6368191 (accessed March 16, 2022).

House Bill No. 10823 in the 18th Congress. An Act Providing for a Mechanism to Ensure the Steady and Uninterrupted Supply of Petroleum Products in the Country, Amending for the Purpose Republic Act No. 8479, Otherwise Known as the "Downstream Oil Industry Deregulation Act of 1998". Quezon City, Philippines: House of Representatives.

Independent Review Committee (IRC). 2005. The Report of the Independent Committee Reviewing the Downstream Oil Industry Deregulation Act of 1998. https://www.doe.gov.ph/sites/default/files/pdf/downstream_oil/irc-report-2005.pdf (accessed March 17, 2022).

International Energy Agency. 2022. Oil Stocks of IEA Countries: Measured in days of net imports. Article - 16 March 2022. https://www.iea.org/articles/oil-stocks-of-iea-countries (accessed on March 20, 2022).

International Monetary Fund. 1995. Philippines: Recent Economic Developments, 01 December 1995. https://www.elibrary.imf.org/view/journals/002/1995/113/article-A001-en.xml (accessed on April 2, 2022).

Kojima, M. 2009. Government Response to Oil Price Volatility: Experience of 49 Countries. Extractive Industries for Development Series #10, July 2009. The World Bank. https://openknowledge.worldbank.org/handle/10986/18234 (accessed on March 20, 2022).

Kojima, M. 2016. “Fossil Fuel Subsidy and Pricing Policies: Recent Developing Country Experience.” Policy Research Working Paper. World Bank. https://openknowledge.worldbank.org/handle/10986/23631 (accessed March 16, 2022).

Letter of Instruction No. 842, series of 1979. Manila: Office of the President.

Letter of Instruction No. 1335, series of 1983 (Rationalizing and Regulating the Operation of the Oil Industry). Manila: Office of the President.

Letter of Instruction No. 1431, series of 1984. Manila: Office of the President.

Letter of Instruction No. 1441, series of 1984. Manila: Office of the President.

Letter of Instruction No. 1460, series of 1985. Manila: Office of the President.

Malawi National Assembly. 2004. The Liquid Fuels and Gas (Production and Supply) Act 2004. https://mera.mw/downloads/the-liquid-fuels-and-gas-production-and-supply-act-2004/ (accessed on March 16, 2022).

Mendoza, M. 2014. Lessons Learned: Fossil Fuel Subsidies and Energy Sector Reform in the Philippines: GSI Report. https://www.iisd.org/system/files/publications/lessons-learned-ffs-energy-sector-reform-philippines.pdf (accessed on April 2, 2022).

Mianjira, Duncan. 2022. “Malawi: Mera Set to Adjust Pump Fuel Prices - As Cama Demands Review Review of Many Levies On Fuel Prices.” *Nyasa Times*, January 27. https://allafrica.com/stories/202201270557.html (accessed on March 18, 2022).

Minh, Anh. 2021. “Global hike pushes Vietnam fuel price to 7-year high.” *VN Express International*, October 27. https://e.vnexpress.net/news/business/economy/global-hike-pushes-vietnam-fuel-price-to-7-year-high-4377626.html (accessed on March 14, 2022).

Mishra, R. 2022. India must boost oil storage capacity. *The Hindu Business Line*, March 19. https://www.thehindubusinessline.com/opinion/india-must-boost-oil-storage-capacity/article65237345.ece (accessed on March 21, 2022).

National Assembly of the Socialist Republic of Vietnam. 2009. Decree No. 84/2009/ND-CP. https://vanbanphapluat.co/decree-no-84-2009-nd-cp-of-october-15-2009-on-petrol-and-oil-trading (accessed on March 14, 2022).

National Congress of Chile. 2014. Law 20765. https://www.bcn.cl/leychile/navegar?idNorma=1064172 (accessed on March 17, 2022).

Nkawihe, Maurice. 2016. "Consumer activist Kapito rues Malawi fuel prices increase." *Nyasa Times*, June 11. https://www.nyasatimes.com/consumer-activist-kapito-rues-malawi-fuel-prices-increase/ (accessed on March 18, 2022).

Ombay, G. 2022. DOE had shortcomings in its response to fuel price hikes –Pacquiao. *GMA News*, March 7. https://www.gmanetwork.com/news/topstories/nation/824193/doe-had-shortcomings-in-its-response-to-fuel-price-hikes-pacquiao/story/ (accessed on March 7, 2022).

Pazzibugan, D. 2022. Comelec spares PUV fuel subsidy release from ban. *Philippine Daily Inquirer*, April 7. https://newsinfo.inquirer.net/1579518/comelec-spares-puv-fuel-subsidy-release-from-ban (accessed on April 14, 2022).

Philippine Institute of Petroleum. 2021. Amending Oil Deregulation Law, October 25, 2021. https://pip.com.ph/2021/10/25/amending-oil-deregulation-law/ (accessed on March 18, 2022).

Philippine Statistics Authority. 2020. *2018 Family Income and Expenditure Survey*. Quezon City, Philippines: Philippine Statistics Authority.

Praiwan, Y. 2020. Oil reserves reduction readied. *Bangkok Post*, April 10. https://www.bangkokpost.com/business/1896995/oil-reserves-reduction-readied (accessed on March 20, 2022).

Presidential Decree No. 1956. Imposing an Ad Valorem Tax on Certain Manufactured Oils and other Fuels, Bunker Fuel Oil and Diesel Oil; Revising the Rates of Specific Tax Thereon; Abolishing the Oil Industry Special Fund; and for Other Purposes. Manila: Office of the President.

Remitio, R. 2022. Bongbong Marcos now prefers subsidies over excise tax suspension to address rising oil prices. *CNN Philippines*, March 13. https://www.cnnphilippines.com/news/2022/3/13/Bongbong-oil-subsidy.html (accessed on March 13, 2022).

Republic Act No. 6173. An Act Declaring a National Policy on the Petroleum Industry, Regulating the Activities and Relations of Persons and Entities Engaged therein, Establishing an Oil Industry Commission to Effectuate the Same, and Defining its Functions, Powers and Objectives, and for Other Purposes. Manila: Congress of the Philippines.

Republic Act No. 6952. An Act Establishing the Petroleum Price Standby Fund to Support the Oil Price Stabilization Fund (OPSF), and Appropriating Funds therefor. Manila: Congress of the Philippines.

Republic Act No. 7639. An Act Providing for the Payment in Part of the Subscription of the National government of the Republic of the Philippines to the Capital Stock of the National Power Corporation Out of the Oil Price Stabilization Fund, Amending for the Purpose Presidential Decree No. 1956, as Amended. Manila: Congress of the Philippines.

Republic Act No. 8180. An Act Deregulating the Downstream Oil Industry, and for Other Purposes. Manila: Congress of the Philippines.

Republic Act No. 8479. An Act Deregulating the Downstream Oil Industry, and for Other Purposes. Manila: Congress of the Philippines.

Republic Act No. 11285. Energy Efficiency and Conservation Act. Manila: Congress of the Philippines.

Stevens, P. 2022. Crude oil jumps as much as 7% on U.S. ban of Russian imports, but trades off session highs. CNBC, March 8, 2022. https://www.cnbc.com/2022/03/08/americans-are-paying-the-most-at-the-pump-on-record-amid-a-surge-in-energy-prices.html (accessed on March 15, 2022).

Supreme Court. 1997. *Tatad vs. Department of Energy and Department of Finance (G.R. No. 124360) and Lagman et al. vs. Torres et al. (G.R. No. 127867).* https://www.lawphil.net/judjuris/juri1997/nov1997/gr_124360_1997.html (accessed on March 19, 2022).

———. 2008. *Republic of the Philippines, Represented by the Department of Energy (DOE) v. Pilipinas Shell Petroleum Corporation (G.R. No. 173918).* https://lawphil.net/judjuris/juri2008/apr2008/gr_173918_2008.html (accessed on March 19, 2022).

Taiwan Research Institute. 2018. Oil Security and Stability. https://www.trien.tri.org.tw/oil-security-and-stability (accessed on March 20, 2022).

The Bohol Times. 2022. Escudero eyes OPSF return to subsidize oil high prices. *The Bohol Times*, March 6. https://theboholtimes.com/?p=346 (accessed on March 30, 2022).

The Nation. 2022. Thai oil companies told to boost reserves as Russia-Ukraine war continues. *The Nation*, March 11. https://www.nationthailand.com/business/40013285 (accessed on March 20, 2022).

Wallace, J. 2022. Oil Prices Top $120 as China Eases Lockdowns. The Wall Street Journal, May 30, 2022. https://www.wsj.com/articles/oil-prices-hit-two-month-high-as-china-eases-lockdowns-11653933068 (accessed on May 31, 2022).

World Bank. 1993. The Debt Crisis. *World Bank Information Briefs*. https://documents1.worldbank.org/curated/en/934651478249558658/pdf/109379-BRI-WBG-PUBLIC-date-04-01-1993-Debt-Crisis.pdf (accessed on April 2, 2022).