



Indonesia's Oil Subsidy Opportunity

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THE QUADRUPLING OF oil prices over the past five years has had a significant impact on public finances across East Asia. Government budgets in many economies are under pressure, particularly when saddled with substantial energy subsidies. Only in the few countries that are net energy exporters would one expect to see a benefit from higher oil prices.

As one of those exporters, however, Indonesia is an exception: So far at least the government has failed to reap net gains from trade in fuels, even though revenues from oil and gas represent around 30% of the country's budgetary resources. The main reason is that Indonesia represents the most extreme example of spending on energy subsidies in the East Asia region.

At the end of May 2008 the government took a crucial step by raising subsidized fuel prices by an average of 28.7%. The authorities also plan to introduce measures to restrict subsidized fuel consumption later in the year. However, if global crude oil prices continue to increase at current rates Indonesia could face a re-

peat of this challenge within the next 12 months.

Jakarta is missing a huge opportunity to use its oil and gas revenue windfall to push for better infrastructure and public services. Indonesia is still a net beneficiary of high oil prices, notwithstanding spending on energy subsidies that disproportionately benefits Indonesia's richest households. However, there is a mismatch between the center and the regions. The central government receives most of the revenues but also needs to pay for all the subsidies. The higher the gap between national and international fuel prices, the lower the benefits for the center. By contrast, the regions, which are not paying for the subsidies, are always net beneficiaries of high oil prices.

Indonesia's oil and gas sector is a significant segment of the overall economy, al-

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though more modest than in previous years. But today Indonesia is only a net energy exporter thanks to its exports of liquid natural gas. The petroleum sector—once the country’s flagship driver of economic growth—has now become its Achilles’ heel. Since 2000, crude oil production has declined by one-third, just as international prices have surged at their fastest rate in the past three decades.

The continuous decline in production made Indonesia a net petroleum importer in 2003. However, proven oil reserves have increased over the past two years and now stand at 13 years of 2008 production levels. Coupled with Indonesia’s growing gas exports, these new oil reserves provide the country with an opportunity to re-emerge as a strong energy exporter once again.

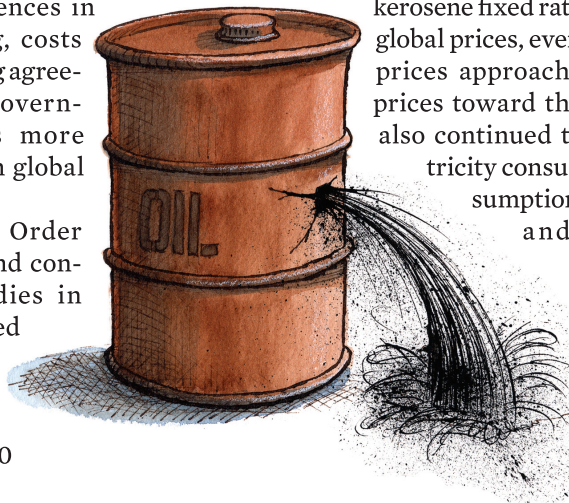
Declining oil production has led to stagnation in oil and gas revenues, while nonoil and gas revenues, such as income tax and value added tax, have been increasing. This is why oil and gas now play a smaller role in Indonesia’s public finances than they did in 2000, prior to the increase in global oil prices. Since the East Asian crisis, there has been very little investment in new fields in Indonesia, and the existing fields are aging. Higher gas production has partially filled the revenue gap, but gas is less lucrative for public revenue due to differences in production-pricing, costs and revenue-sharing agreements with the government, as well as more modest increases in global gas prices.

Suharto’s New Order regime inherited and continued fuel subsidies in 1967. These increased markedly in the period of the Asian financial crisis from 1998 to 2000

following the sharp depreciation of the Indonesian rupiah. Postcrisis, subsidies started to attain significant levels, prompting the government to raise domestic fuel prices slightly in 2001. Consequently, spending on subsidies declined in 2002 and 2003, also helped by the appreciation of the rupiah. This situation led the government to allow domestic fuel-product prices to move with global prices. However, this bold reform was hastily prepared and poorly communicated. The fuel-price increases, coinciding with an increase in various utility prices on Jan. 1, 2003, prompted widespread protests that, in a pre-election year, forced the Megawati government to decouple domestic and global prices. In effect, the problem was left for the next government to resolve.

The fiscal situation grew increasingly critical as international oil prices almost doubled, to \$55 per barrel in 2005 from \$30 per barrel in 2003. During this period, fuel subsidies increased sharply and reached \$15 billion, nearly 5% of GDP. The newly elected government of President Susilo Bambang Yudhoyono responded by increasing subsidized product prices by a weighted average of 160% over two adjustments in March and October 2005. However, the government kept the subsidized prices of gasoline, diesel and household kerosene fixed rather than linked to global prices, even though gasoline prices approached international prices toward the end of 2005. It also continued to subsidize electricity consumption. Fuel consumption fell immediately and, for several months, retail prices neared the actual economic cost of most fuels.

In 2008, Indonesia is



facing a situation similar to 2005—only this time with higher oil prices and larger volumes. Since 2005, the international oil price has once again doubled, while domestic fuel and electricity prices have been kept constant. Even based on the government's conservative assumption of an average oil price of \$95 per barrel, fuel and electricity subsidies will reach \$15 billion—despite the 28.6% fuel price increase at the end of May. As the chart nearby shows, this is more than double the central government's capital or social spending. Kerosene is the most heavily subsidized fuel product, with a subsidy of \$0.40 per liter (at 2007 average prices), more than twice its administered price of \$0.20 per liter. So, while kerosene makes up only about a quarter of the total volume of subsidized fuel products consumed, it absorbs more than half of the total subsidy; gasoline and diesel account for roughly one quarter of total subsidy spending each.

Even after the May 2008 fuel-price adjustment, subsidies remain the largest spending item in Indonesia's budget. In 2008, government subsidies of energy products will almost certainly reach over 4% of GDP, or almost 20% of central government spending.

One factor influencing the volume of subsidized product consumed is the gap between the subsidized price and the cost of the unsubsidized product. As the gap widens, consumers have more reason to switch to the subsidized product, and smuggling becomes more profitable. As a result, consumption increases. In 2008, fuel consumption is already about 20% higher than initially projected. Recent experience suggests that a 10% increase in the market

price of gasoline leads to 1% more subsidized gasoline being consumed.

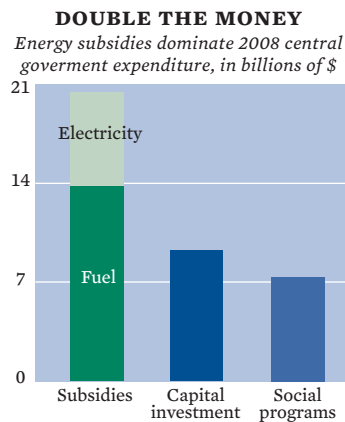
Short of a significant drop in international crude oil prices, Indonesia's policy makers have two options for limiting subsidy spending: raising retail prices of fuel products, or reducing the quantity of subsidized products consumed. Increasing the price of any fuel product will lead consumers to reduce their use of that product, and to switch to other products. Past data suggest that raising gasoline prices to 5,000 rupiah per liter (\$0.55) from the

current price of 4,500 rupiah will reduce gasoline consumption by 2.75%. According to our estimates, a 20% increase in the price of kerosene—relatively modest given its very large subsidy—will lead to about 3.5% less being consumed.

We saw above how fuel subsidies dwarf the government's infrastructure investment and spending on social programs. In addition to this disproportionate

allocation, fuel subsidies are also highly regressive. Subsidies have direct and indirect effects on household real income. Households benefit directly from lower energy prices and indirectly through lower prices for other goods and services, as the fuel subsidy makes them cheaper to produce or distribute. The rich are the main beneficiaries of the fuel subsidy. As the second chart shows, the top 10% of Indonesia's income distribution consumes 45% of the subsidy, in sharp contrast to the poorest 10%, which receives less than 1%. Even this may underestimate the regressivity involved, as those who benefit from smuggling (normally the rich) are not captured in these calculations.

It is often argued that fuel subsidies



NOTE: ASSUMES OIL AT \$95 OPER BARREL
SOURCE: MINISTRY OF FINANCE, 2008 APBN-P;
APBN FOR SOCIAL EXPENDITURE

protect the poor. But on top of the direct regressivity of subsidies, there are other reasons why fuel subsidies are an ineffective social safety net:

- *Subsidies reduce spending for public services and poverty reduction.* Indonesia's public services and infrastructure are in great need of upgrading, but subsidies crowd out these crucial investments.

- *Subsidies undermine good macroeconomic policy.* Spending on subsidies tends to rise when the global economy booms and fall during downturns, given the procyclicality of international oil prices.

- *Subsidies hinder competitiveness.* In Indonesia, Pertamina is the only company licensed to sell fuel at subsidized prices. Although new companies have entered the market recently, they are restricted to market-priced fuels, which are almost double the main subsidized fuels.

- *Subsidies distort price signals for industry and households.* Firms and households make inefficient and uncompetitive choices, resources are used in ways that do not maximize their returns, and production processes are less efficient than they would be if producers faced the true cost of their activities. For example, consumers choose fewer fuel-efficient cars, or live further from their workplaces than they would if they faced the true costs of using fuel. This also increases carbon emissions that are damaging to the environment and harmful to the health of the population.

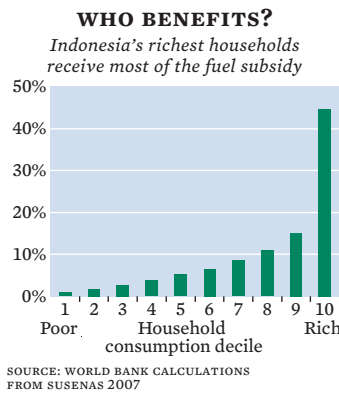
- *Lastly, subsidies generate opportunities for corruption and smuggling of products.* Fuel products can be bought domestically at below-market prices and smuggled to neighboring countries, or used for purposes not intended to benefit

from the subsidy. This in turn weakens the institutions of governance and the rule of law, and wastes entrepreneurial energy.

Oil and gas production is not just a source of revenue for the central government. In Indonesia, the main beneficiaries of high oil prices are subnational governments. These governments receive higher revenues but do not need to contribute toward energy subsidies. Indonesia's more than 450 districts and 33 provinces receive 26% of total revenues as a block grant and a direct share of oil and gas revenues. These

are the two most important components of Indonesia's intergovernmental fiscal architecture, and both have been increasing sharply in recent years, partly due to rising oil prices. However, the fiscal arrangement is more complicated, as the main transfer is determined by an amount set in the budget—not by actual revenues.

The increase in overall government revenues has also led to substantial increases in subnational resources, but the nature of the increase depends on the total revenue estimates of the central government. In the 2006 budget—when the government doubled its oil price assumption to \$60—most districts and provinces experienced “positive revenue shocks,” with an average increase in transfers of 50%. As expected, Indonesia's districts had difficulty absorbing these windfalls. Many have “parked” their extra resources in central bank debt securities, which reached almost \$12 billion (or 3% of GDP) in April 2008. It is likely that Indonesia's subnational governments will experience another positive revenue shock in the 2009 budget, as the central government will need to increase the oil price assumption substantially above \$60 per barrel—



the assumption used in the initial 2008 budget.

The overall “revenue-sharing” arrangement involves two steps. First is the sharing arrangement between the Indonesian government and operators (mostly international companies), as well as the deduction of taxes. These arrangements are governed by production sharing contracts. Second, the remainder is shared between the central government (typically 70%) and subnational governments (typically 30%). These revenues from oil and gas tend to be concentrated in a small number of oil- and gas-producing regions, particularly Aceh, Riau and East Kalimantan. The special autonomy status regions of Aceh and Papua are exceptions, both receiving 70% of the oil and gas revenue-share, the funds from which are then managed at the provincial level.

Indonesia is facing two important challenges related to current high oil prices: the need to mitigate the impact of ballooning fuel subsidies and, at the same time, the need to increase oil and gas production which, paradoxically, has substantially declined over the past five years. As a result, revenues from oil and gas have also stagnated, and become less important in the overall composition of Indonesia’s revenues. Over 2007, oil production fell to a record low of 899,000 barrels per day, subsidies increased 55% compared with the budget assumption, while direct transfers through revenue-sharing stayed close to initial projections. As a result, the “oil and gas balance” of the central government became negative, at 13 trillion rupiah (\$1.5 billion), although it remained positive at 50 trillion rupiah (\$5.5 billion) for all levels of government.

High oil prices lead to higher revenues and expenditures. However, expenditures have risen faster than revenues and, for

the central government, when the oil price passed \$100 per barrel, so expenditures exceeded revenues. Following the average 28.7% subsidized fuel price increase at the end of May 2008, the “crossover point” has now moved to around \$130 per barrel. If the government had not adjusted fuel prices by an average 28.7%, the deficit would have increased by 0.3% of GDP at an average oil price of \$100 per barrel, assuming no expenditure cuts in other government programs. However, with oil prices at \$100, even an average 50% increase in the subsidized fuel price leaves the government spending more on fuel product subsidies than if the oil price had remained at the 2007 level of \$70 and subsidies had not been adjusted.

The government’s oil-price adjustment is an important step toward making the best use of Indonesia’s oil wealth. It frees up resources to protect Indonesia’s poor and to invest in all Indonesians’ future incomes. However, the recent policy move will not be enough if oil prices remain at, or above, \$100 a barrel, and if Indonesia continues to fix fuel prices. One bold solution would be to remove subsidies from the political process altogether by linking regulated fuel prices to the market price in such a way that Indonesians gradually accept the true opportunity cost of the fuel they use. This would eventually allow Indonesia to turn the current fiscal challenges into a huge opportunity to expand social services and infrastructure—along the lines seen in the 1970s, when Indonesia benefited from a similar oil-price boom. If the government is eventually able to redirect all its energy subsidies to public investment programs, Indonesia’s black gold will create an additional \$20 billion each year to invest in education, health, infrastructure and poverty programs for the long-term benefit of all Indonesians. ■