

Case Studies from Emerging and Developing Asia

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PETROLEUM PRODUCT SUBSIDIES

Indonesia

Context

Reforming fuel subsidies has been a persistent policy challenge. The size of fuel subsidies in Indonesia has fluctuated considerably over time, reflecting changes in international fuel prices, the exchange rate, and the subsidy regime. The fiscal costs have been generally large, reaching 2.8 percent of GDP in 2008 when international oil prices peaked. In 2011, fuel subsidies were around 2.2 percent of GDP. Indonesia has attempted to tackle subsidy reform a number of times during this period to improve the fiscal position and achieve other policy objectives, such as improving energy efficiency and protecting the environment.

Fuel Pricing Reforms Since 1997

The government cut energy subsidies in the wake of the 1997 Asian financial crisis, and this contributed to political unrest. In the aftermath of that crisis, the government agreed to cut energy subsidies as part of an IMF-supported adjustment program. Instead of the gradual phaseout strategy that was originally envisioned, the government announced increases in the prices of kerosene by 25 percent, of diesel fuel by 60 percent, and of gasoline by 71 percent (Beaton and Lontoh, 2010). The rapid increase triggered protests in the two weeks after the announcement and, along with a complex range of other factors, including dissatisfaction with the government, eventually led to the end of President Suharto's rule.

A number of price increases were implemented between 2000 and 2003 with mixed success and were then rolled back. In 2000, the prices of gasoline, diesel, and kerosene were successfully raised despite violent demonstrations. These prices were again raised in 2001 not only for households but also for industries. An attempt was made in 2003 to automatically link movements in domestic fuel product prices to international prices. This reform, however, was poorly communicated. Many protesters believed that various government decisions at the time had been in favor of powerful interest groups. General dissatisfaction with political corruption and inefficiency also contributed to public opposition. In

TABLE 6.1

Indonesia: Key Macroeconomic Indicators, 2000–2011					
	2000	2003	2008	2010	2011
Nominal GDP per capita (US\$)	800.0	1091.3	2211.9	2980.8	3508.6
Real GDP growth (percent)	4.2	4.8	6.0	6.2	6.5
Inflation (percent)	3.8	6.8	9.8	5.1	5.4
Overall fiscal balance (percent GDP)	–2.0	–1.4	0.0	–1.2	–1.6
Public debt (percent GDP)	95.1	60.5	33.2	27.4	25.0
Current account balance (percent GDP)	4.8	3.5	0.0	0.8	0.2
Oil imports (percent GDP)	3.5	3.2	4.6	3.4	4.3
Oil exports (percent GDP)	4.8	3.2	3.0	2.2	2.4
Oil consumption per capita (liters)	247.4	254.9	257.8	349.5	n.a.
Poverty headcount ratio at US\$1.25 per day (PPP) (percent of population)	n.a.	n.a.	22.6	18.1	n.a.
Fuel subsidies (percent GDP)	n.a.	n.a.	2.8	1.3	2.2

Sources: International Energy Agency (IEA); IMF, *World Economic Outlook* (WEO); World Bank, *World Development Indicators*.

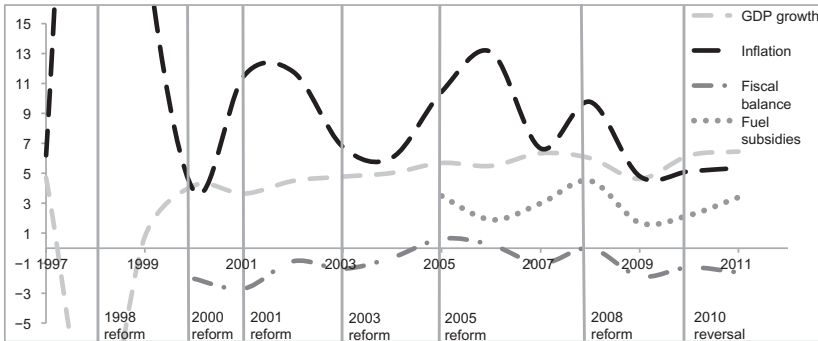
Note: PPP = purchasing power parity.

addition, many of the announced compensation programs did not materialize. As a result, the government rolled back most of the price increases and also severed the link to world prices.

Indonesia became a net oil importer for the first time in 2004 and resumed fuel price increases. Concerned over the increasing fiscal pressure from fuel subsidies, the government undertook two large fuel price increases in 2005. As a result, the price of diesel fuel doubled and that of kerosene nearly tripled. Protests again took place in opposition to the reform, but with less intensity than in 1998 and 2003. The government was led by President Yudhoyono, who was first elected in 2004 and convincingly won reelection in 2009.

Petroleum subsidies have continued, with some reductions. In 2008, with international fuel prices at their peak, petroleum product subsidies reached 2.8 percent of GDP. Fuel prices were raised by 29 percent, on average, and were later reduced as international prices started to fall, though remaining above their pre-increase levels. The government also ceased paying subsidies to larger industrial electricity consumers. The government announced its objective to remove fossil fuel subsidies by 2014. But in September 2010, the House of Representatives agreed to raise budget allocations for subsidized fuel consumption in the revised 2010 budget, which was inconsistent with the government's objective to reduce energy subsidies. Indonesia may have also missed an opportunity to reduce fuel subsidies in 2012 as the proposed increases in fuel prices by the government were significantly reduced by the parliament.

The government has begun to encourage liquid petroleum gas (LPG) use over kerosene. Indonesia also initiated a program to phase out the use of kerosene in favor of LPG in 2007. LPG is less subsidized than kerosene and also has lower levels of cost, pollution, and CO₂ emissions. LPG stoves and small LPG cylinders have been distributed free of charge. However, the program was not without problems and may have led to LPG diversion and accidents.



Sources: IMF staff estimates; IMF, WEO database.

Note: 2008 data on fuel subsidy expenditures are based on domestic prices as of mid-2008, instead of end-of-year domestic prices as for other years; in 1998 inflation was 58 percent and real GDP growth was -13 percent.

Figure 6.1 Indonesia: Macroeconomic Developments and Energy Subsidy Reforms, 1997–2011 (Percent of GDP or rate)

Mitigating Measures

Most of the reforms were accompanied by programs to protect the poor. These included the following:

- *Food subsidies, health and education spending, and other social measures.* Subsidies were created for rice; spending was increased on health, education, and social welfare; and support for small business was increased by providing low-interest loans. However, many of the announced compensation programs did not materialize for the reform between 2002 and 2003. In 2008, education support was targeted to the children of the lowest-ranking civil servants, police, and soldiers (Beaton and Lontoh, 2010; Mourougane, 2010).
- *Unconditional cash transfers.* Unconditional cash transfers and other compensating measures were added during the 2005 reform. A number of analyses have credited the reduced intensity of protests in 2005 to the government's decision to compensate poor households for the increase in their living costs through a number of welfare programs. The most high profile program, *Bantuan Langsun Tunai*, was a series of unconditional monthly cash transfer payments targeted at poor households. The program covered 19.2 million households, or 35 percent of the population, which not only helped the poor but also prevented near-poor households from falling into poverty (Beaton and Lontoh, 2010). Other measures included the health insurance for the poor program, school operational assistance program, and expanded rural infrastructure support project. Awareness of these programs was raised through an extensive public information campaign.
- *Conversion from kerosene to LPG.* An effort to convert households and small businesses from kerosene to LPG has been under way. Kerosene has been

widely used in households for cooking and is the most heavily subsidized petroleum product in Indonesia. Reducing the subsidies for kerosene requires an alternative way to provide affordable cooking fuel for households. The same logic also applies to small businesses. In addition to providing a free starter pack, including a stove and a compact cylinder, the government established a communication program to educate the public on the safety of LPG technology. Government statistics indicate that the program has achieved significant savings by increasing the use of LPG and reducing the consumption of kerosene.

Lessons

Targeted cash transfers can reduce opposition to subsidy reform and assist the poor. Indonesia's unconditional cash transfer program was a successful strategy in overcoming social and political opposition to fuel subsidy reforms. Experience with the Bantuan Langsung Tunai program suggests that such programs need good preparation, deployment, and monitoring to effectively assist the poor.

Providing an affordable alternative energy source could also help reduce subsidies and minimize opposition to reforms. Initial data indicate that the kerosene to LPG conversion in Indonesia has been successful. It has achieved the government's goal to reduce fuel subsidies with limited adverse impacts on households and small businesses.

A rapid reduction of subsidies can generate opposition to reform. The sudden, large price increases in 1998 and 2003 were strongly resisted by the public.

Reforms are more likely to be successful with a popular government. The failure of the 1998 reform to some extent reflected public dissatisfaction with the Suharto government. The reforms that followed between 2000 and 2003 were a mix of success and failure, in which the public distrust of the government also played a role. The success of the 2005 and 2008 reforms, in contrast, was helped by the popularity of President Yudhoyono at the time. The erosion of his popularity in recent years, however, may have contributed to the reversal of the reforms.

Reform initiatives are often triggered by adverse economic events, but durable reform requires recognition of the benefits of subsidy removal and long-term commitment to it. The 1998 reform was triggered by the Asian financial crisis. The 2000–2003 reforms were responses to the resulting high fiscal imbalance and government debt. Fiscal pressure and a negative current account balance were the main causes of the 2005 reform as Indonesia became a net oil importer in 2004. And the 2008 reform was the result of historically high oil prices. Without a firm plan for subsidy removal, subsidy reform was stalled in 2010 despite favorable economic conditions.

Ad hoc price adjustments without a clear long-term goal, together with the inability to depoliticize pricing and subsidy policy, led to the reemergence of subsidies and the failure to implement durable reform. Ideally, once the political decision has been made to reduce or remove energy subsidies, technical decisions on prices and quantities to subsidize can be delegated to an independent institu-

tion that analyzes reform options, disseminates their potential impact, and makes reform recommendations that should be fully implemented. This could improve the transparency of the reform process and reduce the likelihood of setbacks because of election politics. The National Energy Council in Indonesia, however, is not fully independent of the political process. The action by the House of Representatives to increase subsidies in 2010, for example, might have been prevented if there had been a depoliticized decision-making process both for pricing and for the determining quantities to be subsidized.

Communicating the reform objectives and planned mitigating measures to the public can be effective in promoting the acceptance of reforms. As the public becomes better informed about the reasons for, and the objectives of, reforms, it is more likely to understand and accept the measures. Better communicating about the mitigating programs can increase their take-up and thus reduce the negative impact on many households as well as public opposition. The opposition to the 2003 reform in Indonesia was partially motivated by the belief that the reform had been in favor of powerful interest groups.

Philippines

Context

Prior to the deregulation reforms in the late 1990s, the downstream oil sector was heavily regulated, resulting in price subsidies of fuel products when international oil prices rose. The Oil Price Stabilization Fund stabilized domestic prices of fuel products by collecting or paying out the difference between regulated domestic prices and actual import costs. However, increases in domestic prices were politically difficult to implement.¹ As a result, the national government had to replenish the fund by transferring 0.8 percent of GDP in 1990 and 1996.

Reforms Since 1996

The Philippines, a net oil importer, eliminated fuel subsidies through deregulation of the downstream oil industry in the late 1990s. The deregulation largely depoliticized price settings and eliminated fiscal risks by abolishing an oil price stabilization scheme. It was prompted by the government's initiative of economic liberalization; after a "People's Power" revolution in 1986, successive reformist governments abandoned the previous development path of monopoly and protection and liberalized and opened up the economy. At the same time, deregulation was implemented in the context of fiscal consolidation, a key policy objective to restore macroeconomic stability and overcome debt overhang after external debt crises in the early 1980s. These objectives were supported by IMF programs—deregulation of the oil sector was part of the program conditionality of the 1998 Extended Arrangement.

¹For example, an attempt to raise fuel product prices was abandoned because of nationwide protests in 1994. The protest groups consisted of the church, the business sector, labor unions, and other civil society groups (Bernardo and Tang, 2008).

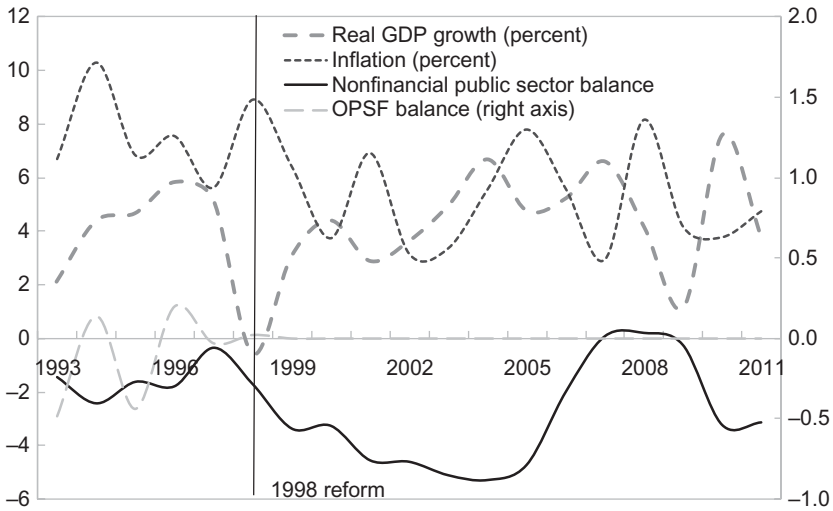
TABLE 6.2

Philippines: Key Macroeconomic Indicators, 2000–2011					
	2000	2003	2008	2010	2011
Nominal GDP per capita (US\$)	1055.1	1024.8	1918.3	2123.1	2223.4
Real GDP growth (percent)	4.4	5.0	4.2	7.6	3.7
Inflation (percent)	3.8	3.4	8.2	3.8	4.8
Overall fiscal balance (percent GDP)	–3.4	–3.6	0.0	–2.2	–0.8
Public debt (percent GDP)	58.8	68	44.2	42.2	40.5
Current account balance (percent GDP)	–2.7	0.3	2.1	4.5	2.7
Oil imports (percent GDP)	3.9	3.8	12.4	9.6	13.5
Oil exports (percent GDP)	0.4	0.5	1.8	1.4	1.9
Oil consumption per capita (liters)	154.7	150.4	127	140.9	n.a.
Poverty headcount ratio at US\$1.25 per day (PPP) (percent of population)	22.5	22	n.a.	n.a.	n.a.

Sources: IEA; IMF; WEO; World Bank, *World Development Indicators*.

The oil deregulation law liberalized the industry and depoliticized the price setting of fuel products. An initial deregulation law was passed in 1996, liberalizing the downstream oil industry and the price setting of fuel products. The Oil Price Stabilization Fund balance improved in 1996 as it received transfers from the national government and fuel prices were raised according to an automatic pricing mechanism after the passage of the deregulation law. The prices were allowed to move freely in February 1997. As a result, the Oil Price Stabilization Fund was abolished, eliminating its cost to the budget (Figure 6.2). When the law abolishing it was ruled unconstitutional by the Supreme Court in November 1997, the government introduced a new law to reinstate deregulation while correcting the constitutional deficiencies of the previous law. The new law was enacted in 1998. The industry remains liberalized today, and movements in international oil prices have been passed through onto domestic prices.

The success of the reform can be attributed to good planning, a well-designed communication strategy, effective consensus building, and strong political will (Bernardo and Tang, 2008). Initially, the political environment was not conducive to such a reform, because President Ramos had won the election by only a small margin and his party was a minority in both chambers of congress. Nevertheless, the reform was planned and communicated soon after the president took office in 1992. A public communication campaign began at an early stage and included a nationwide road show to inform the public of the problems of oil price subsidies. Although the president's party was a minority in congress, he set up a coordination body between the executive and the two chambers of congress and used it to prioritize the oil deregulation bill and forge consensus on it. The commitment of the oil sector reform as part of the conditionality of an IMF program helped to set a time frame for passing legislation. It was opportune that the initial deregulation bill was advanced in 1994–96, a “lull” period with declining inflation, high output growth, and stable exchange rates. Political leadership was exercised when the president pursued the reform despite the Supreme Court ruling that the 1996 deregulation law was unconstitutional—the revised



Sources: IMF staff estimates; IMF, WEO.

Note: The Oil Price Stabilization Fund (OPSF) was abolished after the oil sector deregulation in 1998.

Figure 6.2 Philippines: Macroeconomic Developments and Energy Subsidy Reforms, 1993–2011 (Percent of GDP unless otherwise noted)

bill was enacted in 1998 amid a negative growth shock from the Asian crisis, a surge in domestic oil prices resulting from exchange rate depreciation, and renewed political pressure to reregulate the industry.

Mitigating Measures

The authorities introduced appropriate indirect measures to mitigate the effect of the reform (Bernardo and Tang, 2008). For example, the 1996 law included a transition period during which fuel product prices were adjusted monthly using an automatic pricing mechanism. During this period, the government provided transfers to the Oil Price Stabilization Fund to absorb price increases in excess of a threshold. For some years after the deregulation, the government adjusted the duty on oil imports when international oil prices exceeded a threshold, and it used moral suasion to persuade oil companies to adjust prices in small increments.

More recently, the authorities announced several measures to mitigate the impact of the food and fuel crisis in mid-2008. The government launched a package of pro-poor spending programs that are financed by windfall value-added tax (VAT) revenue from high oil prices. The policy package included

- electricity subsidies for indigent families;
- college scholarships for low-income students; and
- subsidized loans to convert engines of public transportation to less costly LPGs (World Bank, 2008).

In addition, the government

- distributed subsidized rice to low-income families; and
- started a pilot project of a conditional cash transfer program in late 2007, which was scaled up in 2008 (Fernandez and Olfindo, 2011).

Lessons

The Philippines' experience with fuel subsidy reform underscores the importance of planning, persistence, and a good communication plan in achieving a successful outcome. The fact that reform efforts started soon after the Ramos administration took office indicates the benefit of advance planning. Commitment to the reform under an IMF-supported program helped set up the time frame for the reform. The reform was supported by a thorough communication strategy, which began at an early stage of the reform. Despite the president's weak political base, a coordination body between the executive and the legislative helped prioritize the reform law. Political leadership was also essential, as evidenced by the government's effort to pass new legislation after the Supreme Court ruling against the first deregulation law.

The survival of the reform to date can be attributed to its comprehensiveness. Rather than ad hoc price adjustments or the simple introduction of an automatic pricing mechanism, the Philippines chose to introduce deeper reforms with liberalization of the downstream oil sector. It succeeded in depoliticizing the price setting of fuel products throughout the product chain, thus raising the bar for a reversal of the reform.

Mitigating measures for the poor during the 2008 fuel price hike helped maintain support for the authorities' approach to fuel pricing. The authorities were able to finance a package of mitigating measures with windfall VAT revenues from higher fuel prices. This was better targeted and a more desirable policy response than a reintroduction of fuel subsidies.

ELECTRICITY SUBSIDIES

Philippines

Context

The Philippine electricity sector became financially unsustainable in the late 1990s. Electricity generation and transmission were monopolized by the state-owned National Power Corporation (NPC) prior to the reform started in 2001. During the 1980s, the NPC's mismanagement led to chronic electricity shortages. To solve this problem, the government opened up the generation sector to independent power producers (IPPs) in the early 1990s to increase supply. Because the NPC was a major purchaser from the IPPs, the IPP initiative left the NPC highly vulnerable to market, exchange rate, and fuel price risks in IPP projects. Eventually, the NPC became financially insolvent in the late 1990s. This was due to the failure to increase tariffs in line with rising costs, as well as the

decline in demand (and higher external debt burden) in the aftermath of the 1997 Asian crisis.²

Reforms Since 2001

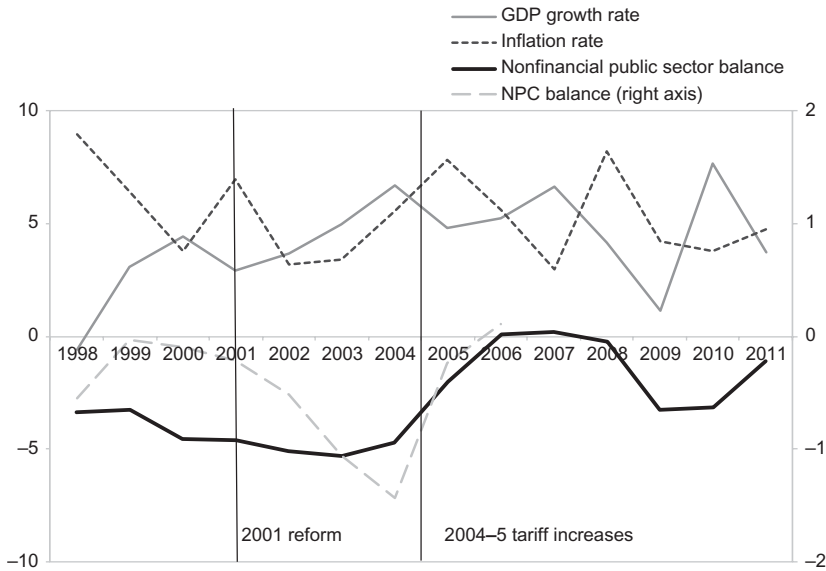
To confront these weaknesses, the government embarked on a major restructuring of the sector in 2001 under the Electric Power Industry Reform Act, which introduced a fundamental reorganization of the electricity sector. It envisaged breaking up the NPC into generation and transmission functions; privatizing generation and transmission assets; unbundling electricity tariffs; establishing the Energy Regulatory Commission, an independent regulatory body that regulates electricity tariffs; creating a wholesale electricity market; and promoting retail competition in the long term. Once it was complete, the reform would eliminate direct fiscal exposure to the electricity sector by depoliticizing tariff setting and limiting government ownership in the electricity sector.

However, passage of the Electric Power Industry Reform Act did not immediately restore the financial sustainability of the electricity sector. Tariff setting remained politicized, despite establishment of the Energy Regulatory Commission in 2001, delaying tariff increases needed to eliminate the operating deficit of the NPC. Limited administrative capacity of the Energy Regulatory Commission was another reason for the delay. In addition, because privatization of generation assets did not pick up until the mid-2000s, the NPC continued to incur losses by purchasing electricity from the IPPs. As a result, the NPC deficit ballooned to 1.5 percent of GDP in 2004 (Figure 6.3).

Substantial tariff increases in 2004–5 were implemented in the context of strong political will to avert a fiscal crisis. The Philippines was on the verge of a fiscal crisis around 2003—the public sector deficit reached 5 percent of GDP on account of weak revenue performance and the large NPC deficit; public debt exceeded 100 percent of GDP and was on a rising path; and deteriorating investor confidence raised external borrowing costs. The Arroyo administration exercised strong political will to avert a crisis and implemented a fiscal consolidation package shortly after the 2004 presidential election. The package included revenue measures, such as increases in VAT and excise tax rates, as well as expenditure restraint. In this context, electricity tariffs were raised by about 30 percent during late 2004 to early 2005, contributing to a reduction in the NPC deficit to 0.2 percent of GDP in 2005 (Figure 6.3). These measures turned out to be successful in averting a fiscal crisis.

Electricity sector reform has continued to advance over the past eight years. In particular, most of the generation assets are now owned by the private sector; wholesale electricity markets are up and running; retail electricity tariffs are unbundled into generation, transmission, and distribution charges; and cross-subsidization among customers has been eliminated except for lifeline tariffs for

²This study draws on various IMF country reports for the Philippines (IMF, 2005b, 2008; World Bank, 2009).



Sources: IMF staff estimates; IMF, WEO.

Note: NPC = National Power Corporation.

Figure 6.3 Philippines: Macroeconomic Developments and Electricity Subsidy Reforms, 1998–2011 (Percent of GDP or rate)

poor families and subsidies provided by the Small Power Utilities Group to users in remote and less developed areas. One remaining issue is settlement of restructuring cost of the NPC—universal electricity charges to cover sunk costs have yet to be introduced.

Mitigating Measures

The adverse effect of the 2004–5 tariff increases on poor households was absorbed mainly by lifeline tariff structures. The Electric Power Industry Reform Act allowed a lifeline tariff schedule as a subsidized rate for poor households. The Energy Regulatory Commission approved lifeline tariff applications for most distributors by 2006. The discount ranged from 5 to 50 percent and benefited three million poor households (Philippines, Department of Energy, 2006).

Lessons

A comprehensive reform that addresses pricing, regulation, and privatization, as well as the mitigation of adverse effects on the poor, can be successful in eliminating electricity subsidies. In the case of the Philippines, establishing an independent electricity regulator helped depoliticize pricing, and privatization reduced the direct fiscal exposure to the electricity sector. A lifeline tariff schedule mitigated the effect of tariff increases on poor households.

Electricity reform can take a while to implement. The Philippines' reform, which started in 2001 and is still ongoing, took a long time to bear fruit. This was because it involves various institutional challenges, such as unbundling the electricity industry, privatizing a large number of generation facilities, and building the capacity of the regulator.

The success of the reform hinged on strong political support throughout the reform process. In the case of the Philippines, the deficit of the state electricity company kept increasing in the early stage of the reform, posing a threat to the country's overall fiscal sustainability. This followed because tariff increases were politicized and delayed even after the establishment of an independent regulator, while privatization of generation assets did not materialize. Tariff increases were eventually approved, because the government remained determined to reduce the deficit of the state electricity company in the context of decisive fiscal consolidation efforts to avert a fiscal crisis.