

POLICY BRIEF



Navigating policy dilemmas in fuel-subsidy reductions: learning from Indonesia's experiences

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ABSTRACT

Fuel subsidies are policy instruments that have historically been used to assist the poor in affording energy for essential household activities. The subventions have, however, been the subject of considerable criticism that they in practice exacerbate inequalities and enrich fuel producers and well-to-do households that do not require support from fuel subsidies. When efforts to resolve tensions across different stakeholder needs lead to unintended, undesirable, and differential impacts across groups and across different time horizons, a policy dilemma emerges. Actors looking to understand or inform fuel-subsidy reform face an analytical challenge in knowing how to effectively frame important interlinkages and identify strategies for intervention. This policy brief responds to this analytical challenge in understanding interlinkages that frame these policy dilemmas by using John Kingdon's multiplepolicy stream framework to analyze how the Indonesian government navigated its energy subsidy reform policy dilemma during 1998-2016. It shares lessons on how the country has managed this situation and discusses implications for further domestic reforms. The Indonesian experience may provide useful insights and lessons for other developing countries looking to navigate the multiple interlinkages across fuel-subsidy dilemmas.

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Introduction

Fossil-fuel subsidies have generally been part of broader policy programs to increase household access to energy. They comprise government payments to producers or consumers to stimulate the production or consumption of particular types of energy (Clements et al. 2013). Such forms of financial support (hereinafter referred to as "fuel subsidies") have been used to lower and stabilize the consumption prices of petroleum products and other kinds of energy such as electricity, natural gas, and coal. The intended effect of the subsidies has been to provide consumer protection, especially for from high and fluctuating poor people energy prices.1

International energy subsidies reached roughly 0.55% of global gross domestic product (GDP) (or around US\$471 billion) in 2018 before falling to approximately 0.36% (US\$312 billion) in 2019 and 0.21% (US\$181 billion) in 2020 (IEA 2021). When also including other related taxation - such as the costs of air pollution and carbon emissions - the "post-tax" global subsidies have been estimated to reach around 6% of global GDP or 15-20 times as

much as the "pre-tax" subsidies (Coady et al. 2019). For example, the 2015 post-tax fuel subsidies were roughly US\$14.5 billion per day, which was more than the total amount of global governmental health spending (Carrington 2015; Coady et al. 2015).

These subsidies can be regarded as state financial assistance to the fuel economy, boosting fuel consumption. In this sense, such financial energy aid is not unique to developing countries. In developed economies, for example, the United States, the United Kingdom, and Denmark (Skovgaard 2018), such assistance takes the form of tax incentives or tax deductions that boost both fossil and renewable fuel production. They are commonly referred to as producer subsidies (Skovgaard and van Asselt 2019; Hess and Mai 2015).

Energy subsidies have, however, exacerbated domestic fiscal imbalances and expedited energyespecially resource depletion, developing countries (Whitley and van der Burg 2015). These expenditures have commonly resulted in underinvestment in infrastructure and development of renewable energy capacity (Diop 2014; Skovgaard and van Asselt 2019; Beaton et al. 2013). Moreover, in developing countries, such subsidies, especially for fuel, reinforce economic inequality because they disproportionately accrue to relatively wealthier households (Dartanto 2013; del Granado, Coady, and Gillingham 2012; Coxhead and Grainger 2018).

Public and policy attention to these adverse impacts have led to a range of efforts to phase out fuel subsidies for various economic, social, and environmental reasons (Clements et al. 2013; Lindebjerg, Peng, and Yeboah 2015). Economically, energy-subsidy reforms widen the fiscal space for development. As financial commitments to subsidies are reduced, financial flexibility is enhanced, giving governments new resources that can be channeled to developing infrastructure. This can gradually lower logistics costs, improve the investment climate, and encourage more vibrant business opportunities (Clements et al. 2013; Bridel and Lontoh 2014). Socially, reforming subsidies can reduce income inequality. For instance, indirect enhancement of fiscal flexibility can lead to improved social protection through expansion of social safety nets and enhancement programs such as better healthcare and education services (Sovacool 2017; Beaton and Lontoh 2010). Environmentally, reducing these subsidies generates incentives for investment in renewable energy, as well as halting the depletion of natural resources. With regard to the current climate crisis, curtailing subsidies can indirectly reduce carbon emissions (Rentschler and Bazilian 2017).

Yet even where the urgency and benefits of fuelsubsidy reform are compelling, such actions are not free from daunting challenges. The concomitant fuel-price increases tend to raise the cost of consumer goods, resulting in increases in the cost of living. Accordingly, they hit poor populations the hardest due to the triggering of instantaneous infla-(Lindebjerg, Peng, and Yeboah Chelminski 2018). Some analysts argue that such reforms thereby eventually undermine the poor's welfare, especially those living in rural areas (Adam and Lestari 2008; Yusuf, Patunru, and Resosudarmo 2017). Moreover, disputes and tensions among political, social, and environmental stakeholders are inevitable. Experiences in both developed (Patashnik 2003; Skovgaard 2018) and developing countries (Clements et al. 2013; Inchauste and Victor 2017; Dansie, Lanteigne, and Overland 2010) have seen economic reform benefits at times co-opted by political and social groups (i.e., certain political parties, non-governmental organizations (NGOs), and student activists (Yusuf, Patunru, and Resosudarmo 2017)), weakening support for later efforts to develop more comprehensive reforms.

Such policy complexity can lead to a policy dilemma (Kingdon 2014; Wash 2020). In the fuel-

reform process, the policy dilemma reflects the fact that governments will need to deal with multiple undesirable consequences in the immediate time without horizon, with or reforms (Dansie, Lanteigne, and Overland 2010) (summarized in Figure 1). Some policy analysts have also invoked the notion of a wicked problem to describe such circumstances (Scott and Baehler 2010; Baehler 2007; Rittel and Webber 1973).

The essential contours of the dilemma that policy makers encounter in reducing subsidies are similar regardless of the development phase of the country (Dansie, Lanteigne, and Overland 2010). For example, policy efforts in the United States have explored pathways for its energy portfolio to transition to renewable energy. Yet such policy-advancement efforts encounter significant opposition from decision makers who contend that such policy change would obstruct economic growth, lead to job losses, and endanger their political capital (Hess and Mai 2015). In developing countries such as Thailand, even though the subsidies have been recognized to deliver outsized benefits to the wealthy, both lower- and middle-class households generally oppose such proposals, fearing that any changes would be corrupt and exacerbate inequalities (Aunphattanasilp 2019). Similar "successfully" led to significant resistance in Malaysia during 2005-2009 and prompted the defeat of several reform attempts (Li, Shi, and Su 2017) as well as in Indonesia (Chelminski 2016) prior to the relatively successful reforms of 2004-2009 (Kyle 2018; Skovgaard 2018).

Kingdon's Policy-Streams Framework

Despite the complexity of resolving the tensions created by subsidy reforms, as illustrated in Figure 1, developing countries continue to pursue fuel subsidy-reform policies (Clements et al. 2013). More often than not, these initiatives become embedded in a conflictual, dilemmatic context (Laan, Beaton, and Presta 2010; Victor 2009; Inchauste and Victor 2017; Sovacool 2017; Skovgaard and van Asselt 2018). One key question facing analysts looking to navigate this complex policy-making process (Larkin 2012) is how governments choose particular strategies to advance their objectives pertaining to the reform of fuel subsidies?

In the field of policy studies, many have argued that political scientist John Kingdon's work on multiple policy streams provides a helpful theoretical framework for modeling the critical dimensions of policy dilemmas (see, e.g., Béland and Howlett 2016; Larkin 2012; Ridde 2009). Policy dilemmas are purported to emerge from three streams of interrelated

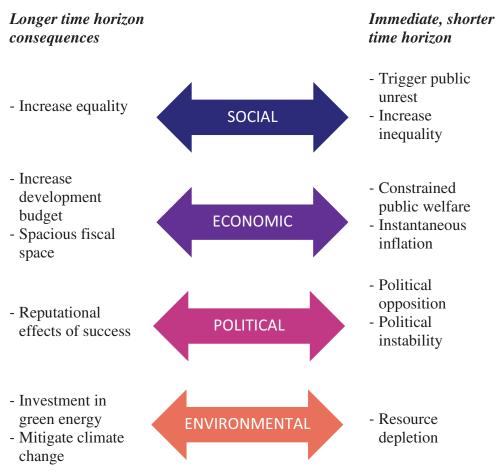


Figure 1. Policy-reform dilemma of fuel-subsidies tensions.

activity: a problem stream, a policy stream, and a political stream. The strength of the three-streams framework is its capacity to identify critical factors capable of simultaneously sustaining or enhancing momentum across these activity streams, as well as to explain how particular events can lead to the opening of a policy "window" for significant change (Kingdon 2014). Such a policy window brings a policy problem into focus and elevates it onto the governing agenda (Béland and Howlett 2016; Larkin 2012). The approach has proved beneficial to analyze policy problems in both developed (Odom-Forren and Hahn 2006; Chow 2014; Brunner 2008) and developing countries (Ridde 2009; Kusi-Ampofo et al. 2015; Ha, Mirzoev, and Mukhopadhyay 2015), though this approach has yet to be used in studies relating to fuel-subsidy reform.

The problem stream represents policy issues, such as financial crisis and potential fiscal failure, which draw public attention and demand governmental actions to resolve them by, for instance, reform policies. The policy stream refers to the various proposals to respond to the policy problems and to drive reform, with contributions from experts, analysts, and even the public. The political stream reflects the myriad factors influencing the political atmosphere and national mood surrounding the policy problem, such as political turnovers

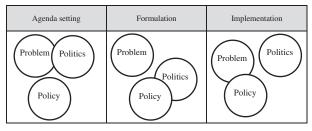


Figure 2. Coupled activity streams in major policy-making stages. Source: Ridde (2009).

and interest-group campaigns for and against the potential reforms (Béland and Howlett 2016).

The interrelations of the three streams trigger the initiation, increase, and sustainment of policy momentum. In practice these are complex to navigate. Figure 2 illustrates how the three streams in Kingdon's framework have been argued to typically combine into three configurations of enhanced coupling of two of the streams in driving policy momentum across three major stages of policy making: agenda setting, policy formulation, and policy implementation (Ridde 2009). At the agenda-setting stage, a policy problem emerges when certain entities (individuals or organizations, called policy entrepreneurs (Kingdon 2014)) open a policy window by coupling the problem with the political streams, making the problem attractive to public



attention. Then, to move it up to the formulation stage, another policy window opens through coupling the problem and the political streams, resulting in policy options. In the end, to bring the problem to the policy-creation agenda, opening another policy window should be undertaken by coupling the policy and the problem streams in the implementation stage (Ridde 2009; Béland and Howlett 2016).

Indonesian subsidy reform as a case study

The fuel-subsidy policies in Indonesia were started by the country's first president (1945-1966), President Sukarno in the 1960s (The Straits Times 2014; Yusuf, Patunru, and Resosudarmo 2017). The policy was carried on by the next "dictatorian" administration (1967-1998)under Suharto. The most subsidized fuel in Indonesia was the RON88 class of gasoline which is the most widely purchased type by Indonesians, with lower octane than the one available in most countries. The other two subsidized fuels were kerosene and diesel (Chelminski 2016; Beaton, Lontoh, and Nugroho 2015). The objective of Indonesia's low fuel-price policy at this time was at least two-fold. First, it was used to drive industrialization and protect the people from relatively higher international oil prices (Yusuf, Patunru, and Resosudarmo 2017). Second, it was a means to retain political power and stability, elevating Suharto as a pro-poor and pro-development leader (Beaton, Lontoh, and Wai-Poi 2017).

Currently, with a population of more than 270 million, Indonesia is a democratic country led by a president and vice president as the top executive leaders, publicly elected every five years. On the legislative side, Parliament (the Dewan Perwakilan Rakyat Republik Indonesia or DPR-RI), plays a vital role in passing laws and reviewing governmental regulations including those related to fuel subsidies. Even though they are popularly characterized as being pro-poor, Indonesia's fuel subsidies do not actually benefit the poor (Chelminski 2018; Skovgaard and van Asselt 2018; Durand-Lasserve et al. 2015).² Experts have different estimations regarding the inefficient distribution of the subsidies. Agustina, Fengler, and Schulze (2012) contend that in 2010, over 50% of the subsidies went to the wealthiest 30% of the population. Meanwhile, Diop (2014) estimates that in 2012 over 80% of Indonesia's fuel subsidies accrued to the top half of households in the country. These estimations, regardless of the difference, show how fuel subsidies do not, in the end, benefit the poor due to the fact that fuel consumption is dominated by relatively

affluent households (Kyle 2018; Diop 2014; Agustina et al. 2008).

In terms of fuel-subsidy reforms, Indonesia's trajectory is filled with long, dynamic episodes, shaped by "policy dilemmas," especially during 1998-2016 (Dansie, Lanteigne, and Overland 2010; Umoro 2020; Garnaut 2015). Since 1998, eliminating fuel subsidies has become a mandatory objective for every administration, with dynamic results that have been both successful and unsuccessful (Budya and Arofat 2011; Clements et al. 2013; Yusuf, Patunru, and Resosudarmo 2017; Beaton, Lontoh, and Wai-Poi 2017). Even though the reforms have been aimed at correcting the unbalanced benefits provided by the fuel subsidies, poorer constituencies reject the fuel-price changes, due to the indirect impacts of fuel-price increases on the prices of consumer goods. This price increase shocked the status quo that cheap fuel prices are an unreserved right of the people (Beaton, Lontoh, and Wai-Poi 2017) and a fundamental public service obligation of the government (Chelminski 2018).

Moreover, considering that most people are lowskilled laborers, changes in fuel prices directly affect informal jobs such as traditional farmers and streetfood vendors that are reliant on energy-intensive processes (Durand-Lasserve et al. 2015; OECD/IEA 2021). In practice, such a public reservation is then often amplified by political parties, NGOs, and activists that are on the opposing side of the government (Yusuf, Patunru, and Resosudarmo 2017). Politicians, experts, and activists who oppose the reforms have consistently linked the fuel subsidies to people's constitutional rights, thus reforming them would be considered unconstitutional (Beaton, Lontoh, and Wai-Poi 2017; Republika 2015; Chelminski 2016).³

Then in 2014, following the start of President Joko Widodo's term in office, the perceived success of fuel-subsidy reforms in Indonesia changed. Experts praised this period as successful, in which more reform episodes were undertaken than in any previous era, and without significant backlash (Kyle 2018; Chelminski 2018; Skovgaard 2018). As experts contend, Indonesia's experience with fuel-subsidy reform is a practical example of the complexity of this policy process and is typical of the challenges other countries face, especially those with developing economies (Chelminski 2016; Kyle 2018; Yusuf, Patunru, and Resosudarmo 2017).

The next sections present our analysis of the ways that the policy dilemma with fuel-subsidy reform was resolved in Indonesia during the aforementioned period. The first section summarizes the complexity of Indonesia's fuel-subsidy reforms and some of the historic ways that policy makers have

navigated the process of reduction. We then apply Kingdon's multiple policy streams framework to explore how critical tensions have arisen and been attenuated within the context of Indonesia's subsidy reforms. Finally, in the last section, we reflect on the usefulness of using Kingdon's multiple-streams Indonesia's approach to analyze fuel sidy reforms.

Indonesia's fuel subsidy-reform dilemmas

Problem stream

The problem-activity stream focuses on societal development problems that have attracted public attention in Indonesia and have driven government actions to resolve them. Financial crises and public budget imbalances have played a pivotal role in shining light on fuel-subsidy policies, pushing policy makers toward action. During the aftermath of the 1998 financial crisis, Indonesia's GDP contracted by 13.5%, causing a significant financial deficit. Under pressure from the International Monetary Fund (IMF) (The Straits Times 2014), the country reformed its fuel-subsidy policies to reduce the deficit, which raised retail fuel prices by 70%. However, the reform shifted public opinion from Suharto as a popular leader who kept living costs, especially for fuels, low to that of a corrupt leader who had caused the economic crisis. The reform prompted large-scale riots and lootings in major cities in Indonesia such as Medan, Jakarta, and Surabaya with demands for the president to step down (Beaton, Lontoh, and Wai-Poi 2017).

Apart from triggering the transition to the current-day democracatic system, the failed 1998 reform also unearthed the fact the fuel subsidies in Indonesia had been mistargeted (Yusuf, Patunru, and Resosudarmo 2017). The subsidies accounted for a major proportion of national spending in comparison to fields such as defense, healthcare, education, and social security (Indrivanto et al. 2013). Indonesia's spend on fuel subsidies has at times been twice as much as its spend on healthcare. For example, from 2012 to 2016, Indonesia spent Rp320 trillion (around US\$23 billion) on healthcare and Rp765 trillion (around US\$55 billion) on fuel subsidies (Directorate General of Budget 2017; Government of Indonesia 2017).4 In addition, the subsidies accounted for almost twice as much as defense spending and more than one third of the education budget (see Figure 3).

Early in his first presidential term (beginning of 2015), President Joko Widodo decided that instead of a one-off price increase the government would regularly (monthly) adjust the pricing scheme (mostly increase) especially for gasoline and diesel

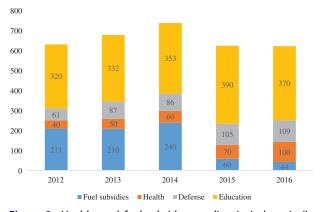


Figure 3. Health- and fuel-subsidy spending in Indonesia (in trillions of rupiah). Source: Data from Directorate General of Budget (2017)

(Yusuf, Patunru, and Resosudarmo 2017; Chelminski 2018). A year later, this gradual reform saved roughly Rp180 trillion (US\$12 billion) in the 2015 budget and made the sum available for other purposes such as infrastructure, education, and social safety-net programs (Yusuf, Patunru, and Resosudarmo 2017; Directorate General of Budget 2017). By 2016, Indonesia's fuel subsidies reached Rp44 trillion (or around 5% of the state budget), in contrast to 2014 when fuel subsidies amounted to approximately 20% of the state budget of Rp240 trillion.

Policy stream

In the policy-activity stream, we identify multiple policy initiatives and responses by different governmental administrations with special significance devoted to framing Indonesia's subsidy-reform dilemma. These include the one-off price increase (and decrease) which was taken prior to 2014, and regularly adjusted price changes after that year. From January-March 2015, for example, the government determined retail fuel prices based on the cost of oil supply (according to an international oil-price index-Mean of Platt Singapore (MOPS), and the exchange rate between the United States dollar and the rupiah) plus taxes, storage, and distribution costs (Beaton, Lontoh, and Wai-Poi 2017; Yusuf, Patunru, and Resosudarmo 2017; Dartanto 2013).5 In other words, the prices of fuels would rise and fall alongside the fluctuating international oil price. Moreover, in some reform episodes, the government managed to openly consult Parliament and civil society organizations before making decisions, which for instance, resulted in the voting in Parliament in 2012. But in other episodes, administrations took decisions without such an open consultation, and the reform carried on. The variety of reform approaches above has mainly arisen from diverse contexts during each of the reforms, including the

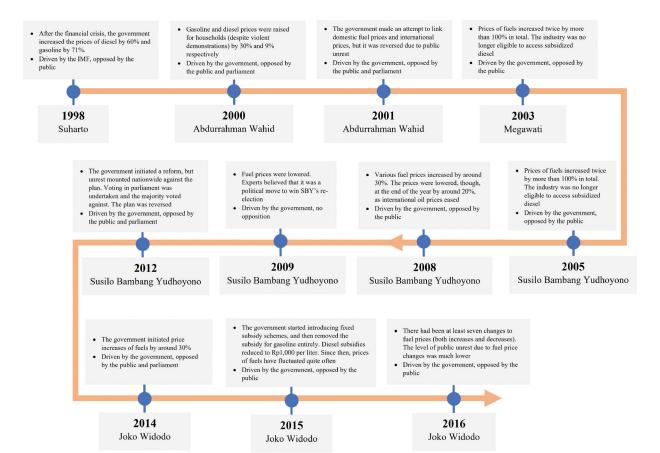


Figure 4. Summary of fuel-subsidy reforms in Indonesia by presidential term. Sources: Chelminski (2016), Clements et al. (2013), The Straits Times (2014), Yusuf, Patunru, and Resosudarmo (2017). *Note.* Presented above the line are the reform policies and the drivers and the opponents; below the line are the presidents and the years the policies were taken.

level of public approval of the ruling administration (Beaton, Lontoh, and Wai-Poi 2017) and the interplays between reform drivers and opposing actors in each of the episodes (Chelminski 2018; Yusuf, Patunru, and Resosudarmo 2017). Figure 4 summarizes Indonesia's 1998–2016 fuel subsidyreform trajectory.

Studies over the years have noted that the fuelsubsidy reforms in 2005 and 2008 were responsible for catalyzing the current successful decreasing trend in total national spend on fuel subsidies (Clements et al. 2013; IMF 2013). During these two episodes of reform, the administration reduced fuel subsidies by more than half and then raised fuel prices approximately to the selected world oil-price index (Yusuf, Patunru, and Resosudarmo 2017). The successful key difference between the 2005-2008 reforms and the prior failed ones was the provision of unconditional cash transfers or Bantuan Langsung Tunai (BLT) (in English "cash direct assistance"). The cash transfers, amounting to less than half of the budget savings from the subsidy removal (Beaton, Lontoh, and Wai-Poi 2017), arguably effectively minimized the adverse effects of the reform especially on poor households (Bazzi, Sumarto, and Suryahadi 2012; Chelminski 2016; Diop 2014; Beaton, Lontoh, and Nugroho 2015). Furthermore, the BLT made the

subsidy removal politically acceptable and prevented major public unrest (Chelminski 2016; Vagliasindi 2013; Beaton, Lontoh, and Wai-Poi 2017).

Going forward, all subsequent fuel-subsidy reforms have been accompanied by social cushioning programs, funded by some part of the fuel subsidy-reduction savings (Beaton, Lontoh, and Wai-Poi 2017). Since 2014, though, the administration has been adopting conditional types of compensation programs. For example, one group receiving the transfers are children from low-income families. To be eligible for the compensation fund, the children must be active students in schools (Asril 2014).

Political stream

Regarding the political stream for fuel-subsidy reform in Indonesia, the political atmosphere significantly influenced subsidy-reform outcomes. Indonesia is home to many political parties whose stances toward fuel-subsidy reforms have varied over time. Table 1 provides an overview of this changing political landscape as well as the various stances of the political parties toward fuel-subsidy reforms. It illustrates the extent to which opposition to reforms could be spread across parties.

Table 1. Indonesia's political landscape and position of the political parties toward fuel-subsidy reforms.

				Political term			Rei	Reform episode	۵	
Political party	Brief description	Main ideology	2005–2009	2009–2014	2014–2019	2005	2008	2012	2013	2014
Partai Demokrat (PD) – Indonesian Democratic Party	Founded in 2001, the party rose to become a ruling party during 2009–2014 under Susilo Bambang Vindhovono's presidency	Nationalism	* 56	148 *	*	0	0	0	0	×
Partai Demokrasi Indonesia Perjuangan (PDIP) – Indonesian Democratic Party	Indonesia's largest and ruling party since 2014, PDIP was founded in 1999 and led by President Megawati Soekanoputri. It is the party of the current President of Indonesia Joko Widodo	Nationalism	109 **	46 * *	*	×	×	×	×	0
Partai Golongan Karya (Golkar) – Party of Functional Groups	Founded as an NGO in 1964, it then became a political party in 1970 to support Suharto's presidency. Now the second-largest party in Indonesia, it had been the largest one until 2014	Nationalism	127	*	91 ***	0	0	×	A	×
Partai Keadilan Sejahtera (PKS) – Prosperous Justice Party	The party was founded in 1998 was influenced by the Islamic Brotherhood in Egypt. It is strongly associated with the far-right Islamic movement in Indonesia	Islamic conservatism	45 *	57 *	40 *	×	×	×	×	×
Partai Persatuan Pembangunan (PPP) – United Development Party	with the far right stantic inversion. In 1973, the party was founded as a sole Islamic political party during Indonesia's New Order Era. It was form merger of some Islambased from merger of some Islambased parties.	Islamism	8 *	% *	33	0	×	×	0	×
Partai Kebangkitan Bangsa (PKB) — National Awakening Party	Dasser, palites. The party was founded by several leaders of Nahdlatul Ulama (Revival of the Ulama) in 1998. It is strongly associated with the Islamic organization and (late) President Abdurahman Wahird	Moderate/Democratic Islamism	* *	* 58	4. ×	×	×	×	×	0
<i>Partai Amanat Nasional (PAN) –</i> National Mandate Party	The state of the state of the party was founded at the beginning of the Reformasi Era (1989). PAN is closely associated with Mirhammadivah (Follower of Mirhammad).	Moderate /Democratic Islamism	. * 55 *	46 *	48 **	×	×	×	A	×
<i>Gerakan Indonesia Raya</i> (<i>Gerindra</i>) – Great Indonesia Movement Party	The party founded by an Indonesian retired army general Prabowo Subianto in 2008 (currently the Minister of Defense). It is now the third-largest party in Indonesia	Nationalism	ı	* * *	* * *	I	ı	×	×	×
Hati Nurani Rakyat (Hanura) – People's Conscience Party	The party was founded in 2006 by an Indonesian retired army general Wiranto. After two successful legislative elections (2009 and 2014), it is currently out of Parliament due to its loss in the last	Nationalism	I	17 *	2 *	I	I	×	×	0
<i>Partai NasDem –</i> National Democratic Party	Preceded by the formation of an NGO called NasDem (Nasional Demokrat – National Democratic), the party was then formed in 2011 by an Indonesian media mogul Surya Paloh.	Nationalism	1	1	* 39	I	I	×	×	0

Source: Komisi Pemilihan Umum (2019); Lane (2019); Bata (2014); Farisa (2019); Umoro (2020); Beaton, Lontoh, and Wai-Poi (2017); Sindonews (2012); Antaranews (2013); detikNews (2014).
Ruling coalition; **Opposing coalition; *Golkar: switch allegiance from opposition to government; PAN: switch allegiance from opposition, to government, then back to opposition.
X: Against, O: for, A: abstain; -: not in parliament.

There is a minority number of political parties that have had a consistent stance on the reforms (Inchauste and Victor 2017; Umoro 2020). Two parties - Gerindra and PKS - have consistently maintained views against the reforms, but they have never been a ruling party. Meanwhile, ruling parties - PDIP and PD - changed their stance toward the fuel-subsidy reforms based on whether they held government or opposition roles. For example, in 2012, PDIP, then the main opposition, successfully undermined the reform proposal offered by PD, then the ruling party. Soon after its 2014 victory, however, PDIP became a strong defender of the reforms, while PD strongly opposed them (Umoro 2020; detikNews 2014; Natalia 2012).

Navigating the subsidy-reform dilemma

Using Kingdon's multiple policy-streams framework (2014), the following section explores the dynamics of resolving the policy dilemma of Indonesia's fuelsubsidy reductions from agenda-setting, to formulation, to implementation (see Figure 2).

Agenda-setting: coupling the problem and political streams

Three periods of crisis connecting the problem and political streams contributed to a sustained opening up of two agenda-setting policy-development windows. In the problem stream, first, the Asian financial crisis triggered a phase of fuel-subsidy reform in 1998 (Chelminski 2018; Beaton, Lontoh, and Wai-Poi 2017). The volatility of oil prices Indonesia's shift from being a net exporter to a net importer of oil then sparked reforms in 2005 and 2008 (Lontoh, Beaton, and Clarke 2015; Laan, Beaton, and Presta 2010). More recently, exchangerate volatility and rupiah depreciation affected the 2014 reforms (Chelminski 2016; Skovgaard 2018).

A first policy-reform window opened when considerable political support from both the public and Parliament gained traction. The government's reform proposals received the needed political support when it was able to disseminate clear messages about the urgency of the reforms and that the policy aligned with the national interest (Beaton et al. 2013). Narratives, for instance, were advanced that the reforms would save the country from deeper financial deficits (2005) and provide savings for infrastructure development (2014). Such messages were at least as significant in garnering political support as previous statistical data on the fiscal burden arising from national fuel subsidies (Beaton, Lontoh, and Wai-Poi 2017; Skovgaard 2018; Umoro 2020).

A second period of simultaneous stream activity enabling reforms as part of the public agenda involved successful negotiations between the ruling administration and Parliament (Indriyanto et al. 2013). The agreement between these two state institutions (executive and legislative) to support fuelsubsidy reduction has proven to be a significant contribution to this early stage of a reform's success, say, in 2005 and 2014; or failure, such as in 2003 and 2012. In summary, parliamentary support has been key to whether reform issues could be raised to the level of policy formulation (Umoro 2020; Chelminski 2018). Parliament's direct or indirect support, for example in 2005 and 2014, indicated that the government could start formulating a fuel subsidy-reform policy.6

Formulation: coupling the policy and political streams

Building public support, especially politically, is crucial during the formulation stage of the process (Ridde 2009; Chow 2014; Yusuf, Patunru, and Resosudarmo 2017). In some of the successful episodes, the government managed to consult various groups of non-state actors to ensure that they were part of all reform processes as representatives of the public (Chelminski 2018; Pradiptyo et al. 2015). Evidence suggests that the government carried out consultations, undertaken both openly and covertly, specifically with some NGOs (Indriyanto et al. 2013). These include private sector organizations like the Indonesian Chamber of Commerce and Industry (KADIN) and the Organization of Land Transport Businesses (ORGANDA), civil society organizations, and Islamic organizations such as Nahdlatul Ulama (Revival of the Ulama) and Muhammadiyah (Followers of Muhammad) (Indriyanto et al. 2013; Republika 2014). In return, these organizations provided advice and policy recommendations on whether to maintain or reduce fuel subsidies.

The most crucial policy window of this stage, though, opened thanks to a favorable parliamentary reception of the reform proposals. Some of the reform episodes failed, such as in 1998, 2001, and 2012 (Beaton, Lontoh, and Wai-Poi 2017), primarily due to the unsynchronized relationship between the proposed reform policy and Parliament's view of the proposals. Conversely, when the reform policy received political support from Parliament, as in 2005, 2008, and 2014, it was approved and quickly formulated for implementation (Chelminski 2018; Skovgaard 2018). Such circumstances resonate with the notion that if the political stream supports



policy proposals, regardless of where they originate, they are likely to be successful (Ridde 2009).

Implementation: coupling policy and problem streams

The success or failure of Indonesia's fuel-subsidy reforms are closely related to the compensation program for the poor (Kyle 2018; Skovgaard and van Asselt 2018; Beaton, Lontoh, and Wai-Poi 2017). In other words, a policy window opened at this stage when the proposed reform ensured that the poor would benefit from it. In some of the successful reforms, the Indonesian government undertook to create cash-transfer programs to cushion the adverse economic impacts of the fuel-price increase on the poor. Evidence shows that the program significantly safeguarded the welfare of low-income households (Durand-Lasserve et al. 2015; Chelminski 2018; Yusuf, Patunru, and Resosudarmo 2017) by mainly increasing their disposable income to offset increasing prices of goods and services (Durand-Lasserve et al. 2015), thus preventing them from falling deeper into poverty (Vagliasindi 2013). However, the cash-transfer program was not part of the reforms that were proposed in 1998 and 2012, which was likely a factor in their lack of success. Moreover, both attempts (1998 and 2012) received hostile public reception, causing public backlash, and, eventually, the initiatives were turned down by the opposition (Chelminski 2016).

Another crucial determining aspect in the failure or success of the Indonesian fuel-subsidy reforms was their timing. As Patashnik (2003) argues, relative timing of public interest reform policies serves to promote reform resilience. In this sense, another policy window opens when the reform meets with public trust. For example, several successful fuelsubsidy reforms were carried out in the early stages of a new period of leadership, when public satisfaction with the ruling administration was still high. The successful reforms in 2005 and 2008, and the failed reforms in 2012, all occurred under the same administration, indicating that public support for subsidy reforms depends at least in part on satisfaction with the prevailing leadership.

The timing of the reform played an important role to open a policy window and, in the end, contributed significantly to the success of the fuel-subsidy reforms. This aspect does not depend merely on public satisfaction and acceptance of government, but on other factors that may forestall significant rejection. For example, the reforms in 2014 and onwards received a relatively positive public reception, not only because of a generally positive perception of the government but also because of the government's control of the political dynamics in Parliament. In policy implementation, cooperation between the administration (executive) and Parliament (legislative) is essential to ensuring that fuel-subsidy reforms were executed.

Conclusion

Fuel-subsidy reforms may always be unpopular and debated economically and politically, especially in developing countries, including in Indonesia. People will resist them if the impacts are anticipated to adversely affect their lives. Similarly, politicians will continue to find it challenging to agree on such reform policies out of fear for loss of public support. Despite the dilemmatic policy context, fuel-subsidy reforms in Indonesia have been continuously implemented across the two decades spanning the 1998-2016 period. Our analysis argues that the eventual success in fundamentally setting a new fuel-subsidy agenda in Indonesia arises from governmental effort in coupling the timing of periods of high public attention to major policy problems with political activity.

The multiple-streams approach provides an effective way to explore and analyze the dynamics of Indonesia's fuel-subsidy reforms. The approach offers a robust framework for explaining the different outcomes over the last few decades and the interplay between the policy, politics, and problemactivity streams.

Notes

- Studies generally define the poor as the bottom income quintile (20%) of the population (Lindebjerg, Peng, and Yeboah 2015; Agustina et al. 2008; Olivia and Gibson 2008).
- In Indonesia, those categorized as poor (the lowest income quintile) are currently around 10%, of the population, a significant decrease from approximately 15% in 2007 (Agustina et al. 2008; Arnani 2021; Baden Pusat Statistik 2021). However, one must note that the poverty line in the country has still been lower, around US\$1 per day, than the one used globally, which is US\$1.90 (Arnani 2021).
- The opposing voices of the reforms often argued that fossil fuels were a natural resource ruled by the third clause of Article 33 of the Indonesian Constitution: "The land, the water and the natural resources within them shall be controlled by the State and shall be used for the greatest prosperity of the people." In that sense, the constantly affordable price of fuels was an unreserved right of the people. Reforming the subsidies, not to mention the market-based pricing, thus, was thought to be an unconstitutional, manipulative, foreign power-controlled (Chelminski 2016; Beaton, Lontoh, and Wai-Poi 2017; Republika 2015).

- 4. Considering the exchange rate during 2019-2021, US\$1 equals approximately Rp14,000.
- The MOPS reference has been used in Indonesia's fuel-pricing mechanism since April 1, 2001, according to Presidential Decree No. 45 of 2001 issued on March 29, 2001 (Presiden Republik Indonesia 2001).
- 6. Relevant to the reform has been Indonesia's ratification of the Paris Agreement in 2016. This development demonstrated the nation's strong commitment to tackling the climate crisis with strategies predicated on low- and zero-carbon emissions as well as renewable energy. However, unlike fossil fuels which have long been considered a significant part of the social life and political dynamics in Indonesia, the renewable energy issue has not yet found a foothold and a policy window because people cannot yet directly associate its impacts (especially the benefits) with their daily social, political, and cultural affairs (Ibrohim, Prasetyo, and Rekinagara 2019; Marquardt 2014). Consequently, in the end, the high potential for new and renewable energy sources has been significantly underutilized as the overall deployment is only around 1.9% (around 8,215 out of 443,208 megawatts), of which the highest (6.4%) is hydropower and the lowest (0.002%) is generated by ocean waves (Rahman, Dargusch, and Wadley 2021; Dewi et al. 2013).

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