Policy brief
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International Growth Centre

Low oil prices during COVID-19 and the case for removing fuel subsidies

In brief

- Global oil prices have decreased due to a fall in demand resulting from COVID-19 containment measures. This presents a timely opportunity for removing fuel subsidies, in turn lowering the knock-on impact on citizens.
- The revenue gained from removing fuel subsidies could provide additional resources for governments to respond with immediate interventions to address the COVID-19 crisis, as well as an opportunity to shift resources into more productive spending for long-run recovery and resilience.
- This brief explains the rationale for removing fuel subsidies during the temporary reduction in global oil prices and presents five policy recommendations for governments to design reforms effectively.

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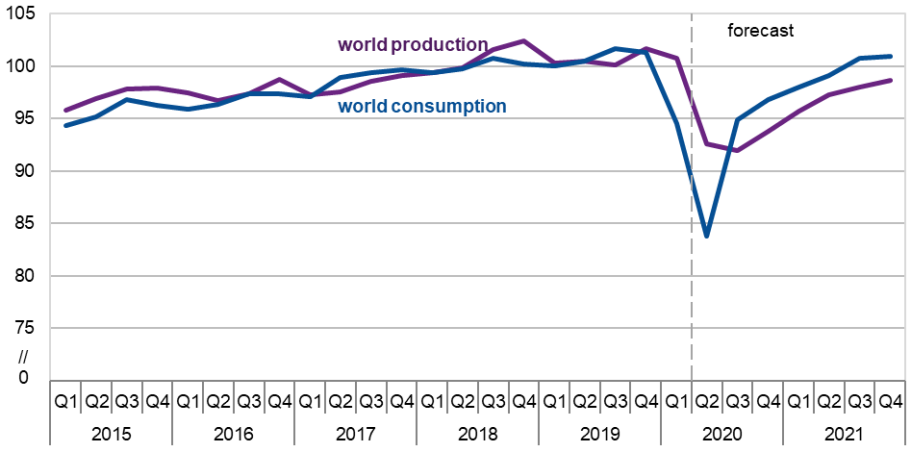
Introduction

COVID-19 is placing immense pressure on governments around the world to increase spending on measures to curb the pandemic and to support struggling firms and households, especially in developing countries. This requires both additional resources as well as better distribution of current resources. IGC's COVID-19 tracker (IGC 2020) shows resources pledged so far is less than 1% of GDP in most developing countries, which is very small due to their limited fiscal capacity. A major reform being considered by some governments and organisations such as the WHO is the removal of fuel subsidies, occasioned by the current pandemic having triggered a decline in global oil prices. This decline presents some benefits, including lower fuel prices for consumers, cheaper transportation costs, and a reduction in import costs to the government. However, these price effects are temporary and will only last until economic activity and demand for oil picks up steam again (Figure 1).

Figure 1: World liquid fuels production and consumption balance



Source: EIA, Short-Term Energy Outlook, June 2020.

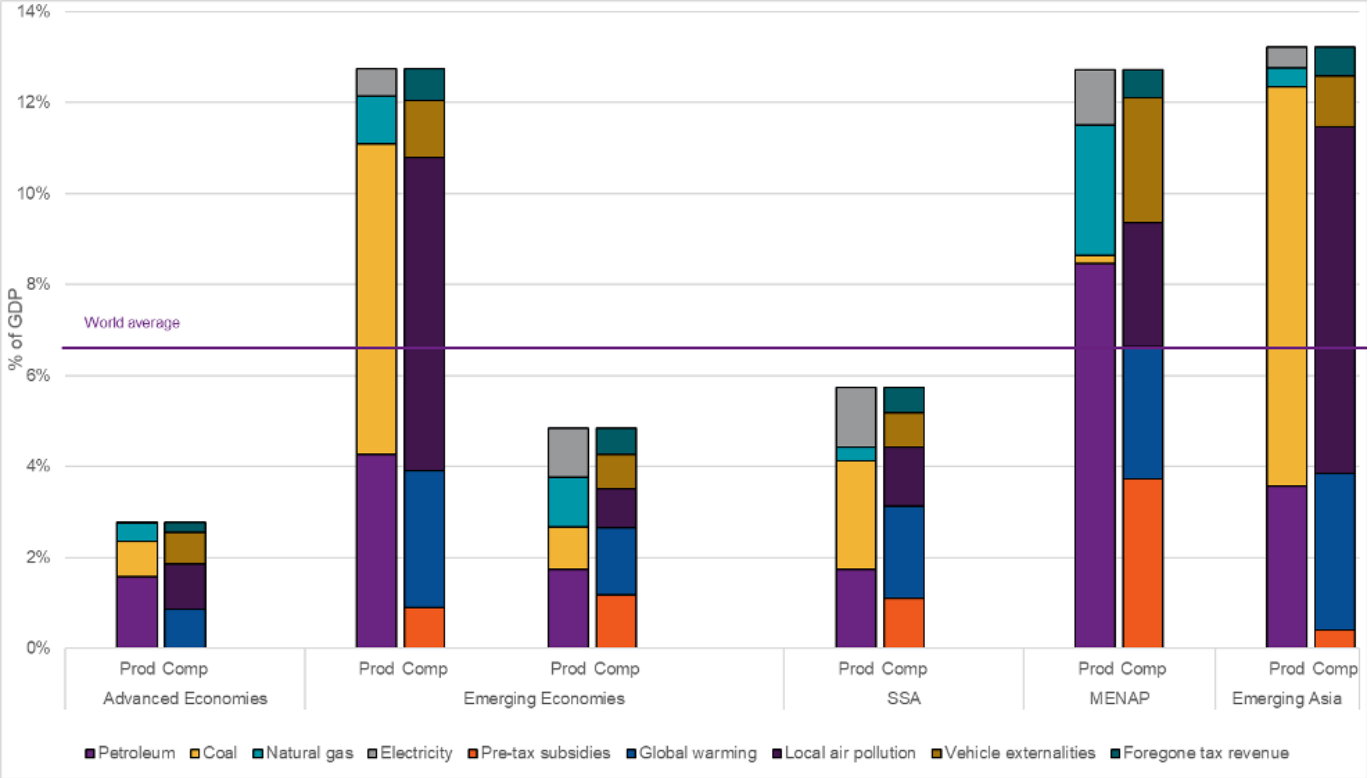
It is, therefore, a fitting opportunity to remove fuel subsidies, as removing subsidies while oil prices are low minimises knock-on impacts on the population (Benes et al. 2015), while also providing governments with more funds for spending on responding to the COVID-19 pandemic, as well as long-term investment. Effective removal of fuel subsidies in a timely manner requires the following key principles:

- Implementing a targeted reform plan that protects the poorest and most vulnerable
- Phasing any price increase appropriately
- Communicating to all groups effectively
- Investing additional funds in productive sectors
- Implementing transparency mechanisms

The rationale and inefficiencies of fuel subsidies

Fuel subsidies take on different structures across countries. They are generally designed to lower fuel prices for consumers, increase welfare, and improve the relationship between government and its citizens. While they are easy to implement, they are also extremely costly, often ineffective in targeting the poorest, and difficult to sustain or remove. Most governments make a net loss when providing fuel subsidies – for example, estimates show world deadweight loss from fuel subsidies to diesel and gasoline alone were approximately $44 billion in 2014 (Davis 2014). However, the true costs also include the under-taxation of fuel consumption due to its contribution to global warming, local pollution, and increased congestion, making a global average of 6.5% of GDP (Figure 2).[1] In its recent update, the IMF (2019) estimates overall welfare costs of maintaining subsidies to be around $1,200 billion worldwide.

Figure 2: Post-tax fuel subsidies breakdown by product & component across income groups and regions



Source: IMF, 2019.

1. See Parry et al. (2014) for a discussion about the quantification of these externalities.

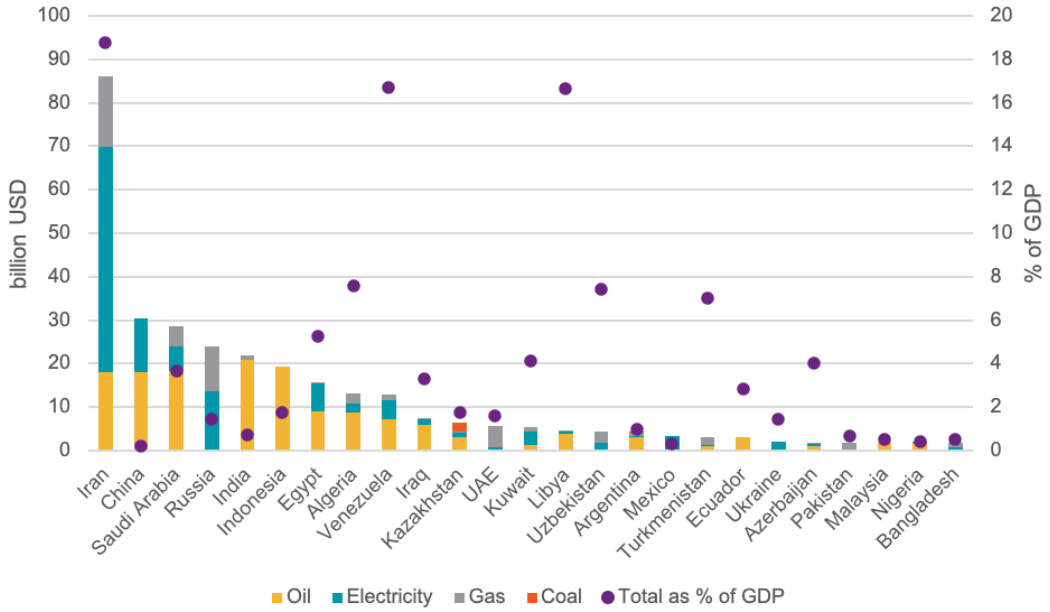
Evidence shows there are five main reasons fuel subsidies are not a sustainable tool to lower poverty and provide resilience for the population:

1. **Distorted benefits:** Many countries provide fuel subsidies as a tool for social welfare protection. However, the benefit of fuel subsidies is distributed in proportion to household consumption of the subsidised product. This has differential impacts depending on what type of fuel is being subsidised. For example, kerosene fuel tends to be consumed more by lower-income households compared to higher-income households, with poorer households in developing countries predominantly using kerosene for lighting and sometimes cooking. However, subsidies are most commonly applied to petroleum and diesel fuels. On average, higher-income households consume more petroleum and diesel fuels compared to lower-income households, as these fuels are used in private transportation vehicles, which are not typically owned by the poorest citizens. Subsidising petroleum and diesel is a costly approach to supporting the poor due to substantial benefit leakage to higher-income groups. In fact, evidence generated from a study on 20 emerging economies indicates that, in absolute terms, the top income quintile captures six times more in subsidies than the bottom quintile (Granado et al. 2010).

2. **Pollution:** When fuel is cheap, it is wastefully consumed and takes away incentives for responsible usage or adoption of fuel-efficient vehicles. In turn, excessive consumption of subsidised fuel has negative impacts on air pollution and health. The impacts of climate change will also overly fall on the poor (IPCC 2018). These negative effects ("externalities") on the environment should typically be taxed (Parry et al. 2014). However, fuel subsidies do the opposite and incentivise increases of consumption activities that have negative impacts. These adverse effects are magnified when subsidised fuel is used in goods not designed for that fuel type, such as paraffin being used in motor vehicles.

3. **Crowding out of public spending:** Governments' cost of fuel subsidies, which includes forgone tax revenue, is large (Figure 3). This spending is even higher in oil-exporting countries, where fuel subsidies are a mechanism to distribute benefits of natural resources to their population. Taxes on fuel imports are often waived, contributing to the loss in tax revenue to the government. Developing countries that rely disproportionally on import taxes due to their lower tax collection capabilities bear the brunt of this sacrifice. Overall, spending on fuel subsidies crowds out resources that can be committed to alternative public spending purposes that are better at targeting benefits to those most in need, such as education and health services, or contribute to boosting productive sectors that support job creation and economic growth. These resources could also be used to facilitate a green transition away from fossil fuels (IISD 2019).

Figure 3: Government direct spending on fuel subsides



Source: IEA, 2019.

4. **Macroeconomic effects:** The extent of the effect on the macroeconomy depends on the country in question and context. For example, whether they are net importers or exporters of fuel affects income equality, fiscal balances, and the level of electricity production and usage. Most countries that are net exporters tend to experience a natural resource curse (Sachs 1997), due to price volatility (Van der Ploeg et al. 2009) and low institutional quality (Torvik et al. 2006). Combined with fuel subsidy commitments, this further increases the negative impact on government revenue, debt levels, and growth. In addition to this, governments printing money to fund their subsidy bill could result in growing inflation and currency depreciation. In turn, this affects people's spending ability and deters foreign investment inflows.

5. **Corruption and smuggling:** A significant portion of benefits from subsidies are not received by the intended beneficiaries, but instead are captured by smugglers and black-market sellers. Arbitrage opportunities are significant with subsidised commodities such as fuel, whereby it is profitable to buy subsidised fuel domestically on the black market, and then smuggle it out of the country and sell at market rates in neighbouring countries. This can lead to shortages of subsidised fuel in the origin country, thereby causing fuel queues and disruptions to industry (see Rentschler 2018). On the other hand, in oil-rich countries, where revenue is more concentrated and subject to corruption, fuel subsidies might provide more visible and easier-to-monitor benefits to the poor, an aspect that needs to be addressed for a successful transition in countries with high levels of corruption.

Low oil prices present an opportunity for reform

Global energy demand decreased by 3.8% in the first quarter of 2020, which includes a decline of almost 5% in oil demand. Aviation and road transport account for nearly 60% of global oil demand, which is currently restricted due to COVID-19 containment measures. Specifically, global road transport and aviation were almost 50% and 60% below the 2019 average (IEA 2020). The decline in demand per country depends on the duration and stringency of lockdown measures, with countries in full lockdown experiencing an average 25% decline in energy demand per week, and countries in partial lockdown experiencing an average 18% decline (IEA 2020). Due to lower demand, the average price of crude oil declined by 39.6% in March and a further 34.8% in April month-on-month, to $21 per barrel (World Bank 2020), which is the lowest level since February 2002.

Why are governments often hesitant to remove fuel subsidies?

- **Knock-on impact on citizens:** If cost of fuel goes up, higher prices trickle down to other goods, increasing cost of living and making many goods and services less affordable. This makes removing subsidies politically difficult. Although public discontent cannot be avoided, it can be mitigated if subsidies are removed at a time when oil prices are low, which lowers the knock-on impacts, and if the removal policy is accompanied by alternative, tangential support measures.

- **Social demand for cheap fuel:** In countries with a history of providing fuel subsidies, it is often the case that low energy prices become part of a shared social demand, a social norm or even civil right. This barrier can raise concerns within government around obtaining buy-in from all parties including the general public to avoid civil uproar and mass protests.

Given oil prices are at an all-time low, for countries that intend to remove fuel subsidies, this is the best time to do so, as impact on society is minimised since low global prices can be passed through to consumers (Coady et al. 2019, Benes et al. 2015).

Five reform recommendations

Some countries are considering removing fuel subsidies at this juncture (such as Nigeria (Olisah 2020)), so as to redirect spending to more efficient means and increase available funds for spending on curbing COVID19, and providing support to struggling firms and households. However, there are risks in doing so and it is important to understand a number of factors in order to design appropriate policy reform, including the true beneficiaries and costs of the subsidy programme, immediate effects on consumers (especially the most vulnerable), general macroeconomic conditions, as well as the underlying political economy in each country. Reform design must be done based on evidence of what works well, which is outlined in the following principles:

1. **Targeted reform plan:** An implementable plan that consists of immediate and long-term objectives, enables countries to have a reform roadmap tailored to their unique context. The strategy must address different groups in the population and obtain buy-in from the poorest as well as the middle class and the wealthiest, including mitigation measures that appeal to all these different groups. The plan should be based on an assessment of the current situation and the potential impacts of reform, amongst all groups. It should also draw from existing data, and best practices where possible. In addition to this, mapping and consulting key stakeholders is necessary to mitigate self-interest lobbying due to conflicting interests (Overland 2010, Vagliasindi 2013).

   An important element of this plan is to target measures to protect the poorest and most vulnerable groups, as a negative income shock for the very poor has more dramatic consequences than it does for richer households. Subsidy removal will create opportunities to redistribute government spending to maximise benefits for those most in need. Most countries that have removed subsidies, have replaced them with broad welfare programmes for sustainable provision of public services. For example, when the Indonesian government removed fuel subsidies, they launched social protection programmes such as a Health Card, which ensures access to medical care for the poor, and a Smart Card, which ensures all school-aged children from disadvantaged families receive financial assistance for their education. Other countries have also implemented free and affordable healthcare, education, and transportation for the most vulnerable. During this pandemic, the need for investment in health and education is especially important, and will add credibility for responding to the crisis, as well as make subsidy removal more politically acceptable. Some countries, such as Malaysia, have opted to invest the revenue in cash transfers for the poorest, which provides visible benefits to people. However, to do so effectively will require overcoming logistical difficulties and sound infrastructure. There is also evidence showing that institutional capacity is a precondition for cash transfer schemes to be successfully implemented (Victor 2009, Cheon et al. 2013). Given the current COVID-19 context, there is arguably a huge requirement for cash transfers that provides resilience to those in need.

The roadmap should also coordinate with related sectoral plans, such as an environmental strategy. For example, subsidy reform will reduce excessive consumption of cheap fuel and its contributions to air pollution and climate change. IMF (2019) estimates that fuel subsidy reform could reduce energy-related CO2 emissions by over 25%.

2. **Appropriately phased price increases:** Some countries have successfully enacted partial subsidy reforms rather than a complete removal, although the latter is the preferred option. However, when certain sectors and consumers may need to be shielded from the effects of the reform, there is an argument to use a phased approach or partial reform. A one-off full removal of subsidy could cause extreme shocks to prices at the pump to which consumers cannot adjust. For instance, initial and unphased attempts to subsidy reform in Ghana in the early 2000s caused fuel prices to nearly double (Laan et al. 2010). On the other hand, Indonesia for example, successfully reformed petroleum subsidies during the 2015 oil price plunge but decided to cap diesel subsidies instead of removing them altogether in order to shield sectors where there may be critical effects and where diesel is the main fuel used, such as public transport and fisheries. Similarly, in the Philippines, the full removal of fuel subsidies in 1997 was anticipated by a five-month automatic pricing phase, which allowed the government to intervene if prices breached a set threshold (Mendoza 2014). Additionally, the rate of removal and details of any phased approach should take advantage of international peer reviews, where possible, which can also add reputational benefits to the legitimacy of calculations. The overall phased approach should also permit households and businesses the necessary time to adjust, where this makes sense. Arguably, the current window of low oil prices offers a lower risk of impact on incomes, which minimises the need for consumer adjustment.

3. **A far-reaching communication strategy:** The reform should be communicated to the public with a clear messaging strategy and with the intention/plan to maintain a good government-citizen relationship. It is necessary to inform the public about the size of the fuel subsidies and rationale behind removal. There should be transparency and channels for scrutiny, which is maximised through effective consultation. It is important that reforms are always led domestically with internal communication of decisions given precedence over external dialogue. Notably, the richer households are the ones that benefit most from fuel subsidies, as well as being the group that has the ability to mobilise people for protests. It is therefore important to appeal to all and inclusively getting the general public on board. Effective government communication played a key role in building public consensus around the bold deregulation reforms of the downstream oil industry in the Philippines. Despite lacking wide political support, Ramos' minority government publicly declared, at the onset, its commitment to wide-ranging liberalisation reforms, including the full removal of fuel

subsidies. The administration then launched a nation-wide road tour with the aim of informing citizens about the issues caused by the price subsidy and the need for change, thereby securing greater support (IMF 2013), and ensured that price increases and the reasons behind them would be communicated once the reform was in place (Mendoza 2014). Communicating key steps, including how the savings will be used and the benefits reform will reap for different groups and the country overall, is key to obtaining mass buy-in. This comprises of having the right person communicating the right message at the right time to the citizens, in a manner that strengthens reporting and transparency.

4. **Investing in productive sectors:** An important alternative use of fuel subsidy funds is through investing in productive sectors. Investing in key infrastructure such as roads, telecoms, ports, dams, utility services, financial services, are all necessary domestic investments that create an enabling environment in attracting foreign direct investment. Investing in the productive sector creates jobs and economic growth, generates long-term resilience, and garners support of the population, including the middle class. As highlighted above, the funds can also be used to invest in the green energy sector, taking advantage of the rapid reduction in renewable energy costs (Lazard 2018; IISD 2019).

5. **Implementing transparency mechanisms:** Whereas subsidised fuel can help reduce corruption, it is important to implement transparency mechanisms when using the additional revenues, particularly in oil-rich countries. This can help the political acceptability of the reform and avoid backfiring, while ensuring a more efficient outcome that minimises corruption in the use of additional state revenues. In particular, state-owned oil enterprises and governments in oil-exporting countries should strive to enhance their transparency in light of increased oil revenues.

Case Study: Fuel subsidy reform in Ghana and the rocky road towards deregulation

Ghana's history of fuel subsidy reform has been marked by incremental steps interrupted by severe setbacks, causing large swings in the size of subsidies, and offers valuable lessons. By mid-2001, Ghanaian authorities implemented an automatic price-setting mechanism coupled with cross-subsidisation of kerosene and gas. Poor government communication, rising oil prices and currency depreciation led to intense popular protests and the reinstating of subsidies by late 2002. Further reform attempts in 2003 failed for similar reasons, in addition to the pressure posed by the upcoming elections: by then, fuel subsidies totalled 2.2% of GDP, above the Ministry of Health's budget (Whitley and van der Burg 2015).

However, the 2005 deregulation reform of petroleum product pricing proved markedly more successful, was publicly accepted and long-lasting, as it leveraged past learnings and international good practice. Key elements included:

- Evidence-based policy: The IMF Poverty and Social Impact Assessment, commissioned and published by the government, highlighted the disproportionate benefits that subsidies conferred to higher-income citizens, and warned that subsidy removal alone would still hit poorest quintiles the hardest. It therefore advised for the tangential implementation of pro-poor mitigating measures (Coady and Newhouse 2006).

- Mitigating measures: To shield the poorest quintiles from the adverse effects of deregulation, government measures included the expansion of the public transport systems with fixed ceilings on fares, the elimination of primary and secondary school fees, increasing the minimum wage, greater healthcare funding in poor areas, improvements in rural electricity networks, amongst others (Laan et al. 2010, IMF 2013).

- Public information campaigns: The authorities leveraged media outlets to inform the population about the reasons for reform, with remarks from the President, government officials, and trade unions. Authorities also made public commitments on social measures that would be adopted alongside deregulation efforts (Laan et al. 2010).

- Independence and transparency: To limit political interference in fuel pricing decisions, the National Petroleum Authority was established and instructed to make the pricing formula transparent by publishing the price components of gasoline (Laan et al. 2010).

Rising oil prices, droughts, electoral pressures and a new government led to the return of price subsidies in 2008, but the soaring $1.2 billion subsidy bill, and fiscal deficit nearing 12% of GDP (Cooke et . 2016), pushed the government to revamp deregulation efforts, attaining full subsidy removal in 2015. Critical elements of success involved:

- Timing reforms: Changes in global commodity prices played a central role in past failures. As a result, the 2015 deregulation took place at an all-time low for oil prices, that had decreased by 88% with respect to 2013.

- Depoliticisation and liberalisation: The sustainability of previous reforms had been hindered by political gambit in the electoral run-up and beyond, and by frequent government interventions in pricing decision. The year 2015 saw the removal of government interference, with the introduction of competition amongst oil companies that lowered pump prices and benefited consumers (Addo et al. 2017).

- Leveraging existing social programmes: Mitigating social measures were replicated in 2015, including an increase in the minimum wage and an expansion of the national cash transfer programme from 73,000 to 150,000 recipients. Recent evaluations found that the programme had positive impacts on reduction of child labour, school participation, public health service take-up, and budgetary savings (van der Burg and Whitely 2015).

Case Study: Lebanon's electricity sector

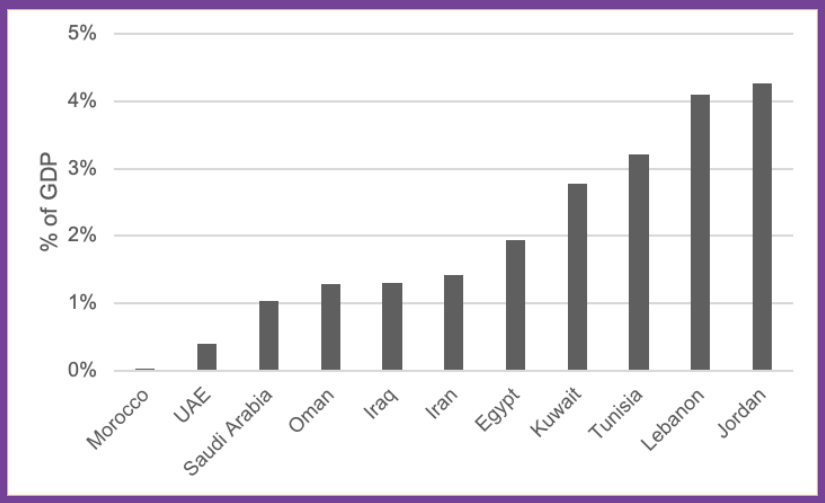
This case study highlights the implications of an inefficient energy sector, as well as the importance of reforming national electricity companies.

Like many of Lebanon's economic and social woes, the problems with the electricity sector originated during the 1975-1990 civil war. After the war, the difficulties remained rooted in a divided and rent-seeking political economy that resulted in a mismanaged and loss-making publicly owned national electricity provider, Electicte du Liban (EdL). Deficiencies in the power sector have long had an economy-wide bearing, with direct implications on Lebanon's growth potential, the economy's competitiveness and productivity, household and firm welfare, the country's balance of payments, and its precarious fiscal position (Harake et al. 2018).

EdL estimated that it supplied only 59% of demand in 2016 and 67% of demand in 2017. EdL's network losses were 34% of total energy sent out (i.e. produced or purchased) in 2017. Non-technical losses – comprising of theft and billing errors – are estimated to be 20% of energy sent out, which is exceptionally high. As a comparison, nearby Jordan has distribution losses (both non-technical and technical) of 12.9% and transmission losses of 1.7%. (World Bank 2020). On the cost side, expensive and polluting diesel fuel (instead of natural gas) is still being used at existing plants. The gap between the power supplied by EdL and demand is covered by pricey and polluting diesel generators that are dispersed almost everywhere in the country.

To cover its losses, EdL relies heavily on government subsidies. Over the last decade, annual budgetary transfers to EdL averaged 3.8% of GDP, amounting to nearly half of the overall fiscal deficit and significantly widening the public debt to GDP ratio. In 2016, Lebanon, alongside Jordan, had the highest electricity subsidies in the region (1.24%), which in turn is well above the average in developing countries (0.6%) (figure 4).

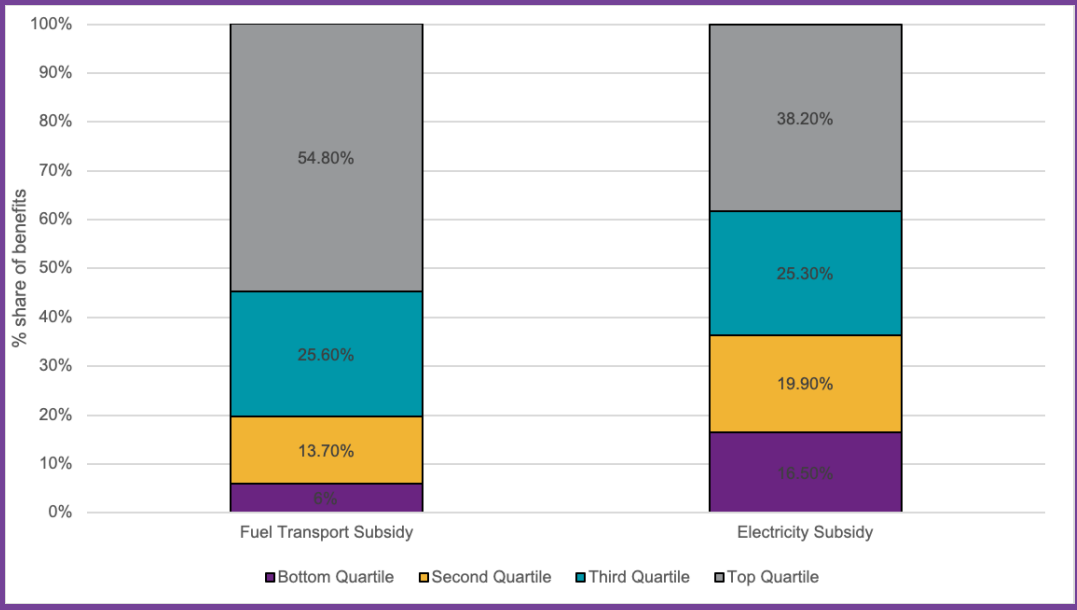
Figure 4: Electricity subsidies in the MENA region, 2016



Source: IMF, 2016.

These subsidies not only place huge fiscal and debt burden on government but are also not shared equitably. The subsidies are not well-targeted and mainly benefit higher-income groups as shown in figure 5. Moreover, the frequency of and length of power cuts is not uniform across Lebanon; it differs between different cities and parts of the country, with the poorest districts Baalabk-Hermel and Akkar enduring the highest outages of more than 10 hours per day compared to an average of 2.8 hours in Beirut (Ali 2020).

Figure 5: Share of benefits from subsidies in Lebanon by income group



Source: MoE/UNDP, 2015.

It was estimated in 2013 that if subsidies (both electricity and transport) were slowly phased out during the period of low energy prices, the primary balance would have shifted from a deficit equal to 0.5% of GDP, to a surplus of 5.1% of GDP (MoE/UNDP 2015).

Reforming the energy sector should be the first cornerstone of any economic growth plan in Lebanon. A progressive tariff reform that would reflect the true cost of electricity generation is a key priority. In addition to this, administrative, organisational and regulatory reforms are necessary to ensure that EdL is no longer operating at a loss. Finally, there is a need to move to increasing production of power generation through more efficient and sustainable means.

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