

Energy Sector Liberalisation: Pricing and Subsidy Reform and the Poor

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Introduction

This article revisits the recent evidence on the state of reforms and innovative pricing and subsidies schemes to unravel the hiatus between the theory and practice of pricing and subsidies policies and sectoral reforms in developing countries.

The energy sector reforms commencing in the 1990s in developing countries were aimed at reducing the inefficiency of the sector and remove the energy supply and financial deficits that impeded social and economic progress in these countries. It gradually became evident post-reform that the restructuring, market reform, and institutional reform of the sector, though necessary, were not sufficient to ensure the socio-economic success of the market-oriented reforms.

Instead, the pre-reform pricing and subsidy schemes had partially achieved their economic and social purpose. However, the burden of the policies grew to unsustainable levels and became the source of many ills of the sector and the economy such as poor technical and financial performance of the sector and ballooning fiscal deficit leading to the need for subsequent changes. Energy subsidies were increasingly serving the better-off groups leaving no surplus to increase the quantity and quality supply and extend the service to those deprived of access to modern commercial energy in many countries.

Energy sector reforms and the poor

The restructuring of the energy sector had made the sources of the inefficiencies of the sector clearer. However, market oriented reforms cannot not deliver the expected efficiency gains without cost-reflective price signals. The sector reforms soon revealed that there is also a need for pricing and subsidies reforms that specifically served the poor contrary to the belief that market reform and private actors would help increase access to energy services. Expanding energy access to the poor consumers with low consumption was not attractive to the private sector and new forms of public intervention was required. A pricing and subsidies reform and access provision, for political economy and equity reasons, could not be delegated to the market. Rather, they continue to firmly belong to the sphere of public and social policy.

Sector reforms have generally been successful in improving the technical efficiency of the sector. However, the consumers have not benefitted from the efficiency gains. Many energy sector reforms are ineffective due to the lack of workable pricing and subsidy reforms while the scale of energy subsidies do not show signs of abating. The global 'pre-tax' subsidies for petroleum products, electricity, natural gas and coal amounted to 480 billion US dollars equivalent to a 0.7% of the global GDP in 2011 (IMF, 2013).

It is helpful to distinguish between energy subsidies in terms of 'access' versus 'end use' support. Access to modern energy has positive socio-economic externalities. Subsidies aimed at energy consumption cause inefficiency, over consumption, and negative externalities. Therefore, pro-poor subsidies need to aim at provision of access to realise the positive externalities, while energy consumption may be priced at its social cost to avoid inefficient use and negative externalities. The, competition based capital subsidy programmes for accelerating energy access, as in some countries such as Chile, can be the basis of access subsidies policies.

Evidence from pro-poor pricing and subsidies

Petroleum products received 44% of the US\$480 billion global energy subsidies, electricity 31%, and natural gas 23%, while coal received 1% of global direct subsidies (IMF, 2011). The economic costs of subsidies include misallocation of resources, incentives for inefficient energy use, increased fiscal imbalances, lower economic growth, lower investments in alternative energy sources, and encourage fuel smuggling (UNEP, 2008; Hassanzadeh, 2012). The total an-

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nual deadweight loss from global fuel subsidies is estimated at US\$44 billion. Incorporating the external costs will increase the economic costs substantially (Davis, 2013). Evidence suggests that the subsidies have mostly benefited the higher income groups rather than the intended poor making the subsidy programmes inefficient, costly, and inequitable.

Subsidies removal have micro and macro economic impacts on the poor. The microeconomic impacts can be direct and indirect (Arze del Granado et al., 2012). The direct impacts arise as poor households face higher energy prices. Although fuel subsidies mainly benefit the rich, the poor are affected given their higher budget share of energy expenditure. The indirect impacts arise as the economy adjusts to higher energy prices that translate into increased production costs for other goods and services. Over time, the economy would benefit from the increased efficiency of factor utilization.

There is also a distinction between the motives behind subsidies in energy-rich countries and in poor countries. In resource-poor countries, the subsidies constitute transfers from public budget or cross-subsidies from better-off consumers to the poor. In energy-rich countries, subsidies are also means for distribution of the resource rent among the population. For example, subsidies account for 82% of the cost of electricity and fuel in Venezuela, 80% in Libya, 70% in Saudi Arabia, 74% in Iran, 56% in Iraq and 18% in Algeria (Kemp, 2014). However, as in other countries, these policies were inevitably inefficient and inequitable. In poorer countries, pricing and subsidies policies are linked to the issue of access to energy for the rural poor.

Some policies provide lower charges for limited quantities of energy for the poor. "Lifeline" block subsidies for low levels of electricity use is one example; another is providing discounts on limited quantities of energy, such as LPG, while charging market prices for additional purchases. However, lifeline tariffs are less efficient than direct income transfers. First, they subsidize the same basic consumption level for all users, rich and poor, so they are poorly targeted. Second, they are usually financed by raising the rates for consumption at higher levels (i.e. a cross-subsidy). Lifeline rates redistribute income among all users and are prone to leakage to non-poor, which dilutes the effectiveness of the policy (Kebede, 2006).

In recent years, some countries have risen to the challenge and devised new policies and schemes. Brazil, Iran, Mexico, and the Phillipines have begun to adopt a combination of subsidy reduction with cash transfers to households. The economic intuition of this approach in terms of choice and efficiency is appealing. However, this appeal needs to be matched with the practical implementation of the scheme. The political economy of subsidy reform is, however, sensitive due to the vested interests and a sense of entitlement and the fact that much of the resistance to subsidy removals is from higher income groups who benefit more from the subsidies than the very poor.

Conclusions

Energy sector reforms were not inherently pro-poor. This created the need for targeted social pricing and subsidies policies. Poorly targeted subsidies tend to benefit the non-poor more as benefits of blanket subsidies are regressive given the low share of energy spending in poor household income. Market oriented capital subsidy schemes such as competition for rural electrification projects can be effective in extending access to commercial energy to the poor.

There are substantial long term gains from subsidies reforms, though short-term benefits are smaller and tempered by adjustment costs justifying a gradual approach to reforms. A gradual elimination of subsidies, combined with lifeline tariffs and cash transfers, can hold down short-term losses and maximize economic benefits over time.

Finally, a major obstacle to innovative subsidy reforms is the weaknesses of the administrations and institutions. Some new policies such as cash supports have been less effective due to underdeveloped administrative capabilities in developing countries. The existence of multiple different channels for providing explicit and implicit energy subsidies means that exact measurement and distribution of subsidies can also be difficult, complicated and non transparent in developing countries characterised with possessing weaker energy sector institutional environment and arrangements.

(See references on page 9)