Chapter 1

Introduction

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Introduction

Historically, energy prices play a major role in the emerging macroeconomic scene and these have driven energy pricing policies in developed and developing countries. Access to affordable and clean energy is crucial for human survival, welfare, and economic development. While all sections of society require energy for their welfare, the management of energy production and pricing is to be based on three building blocks: basic needs, economic growth, and conservation.

In India, the intervention of government in the functioning of market economies to influence the process of resource allocation with policy tools, such as subsidy allocation and tax exemption, remains a matter of debate on political economy. The intention is to achieve socio-economic goals, such as eradication of energy poverty, fair distribution of natural resources to meet demand, and protection of price competitiveness of domestic firms.

However, certain products are demanded both for direct consumption and indirect use (feedstocks). In addition to income, the major determinants of demand are prices of both energy- producing and energy-consuming sectors (non-energy purpose). If energy prices go up, direct consumption is expected to go down. For non-energy purposes, the increase in feedstock cost will ultimately be passed on to the consumers in the form of higher prices for the end product and, thus, the demand will reduce. Also, when energy prices increase, government's tax revenue is expected to increase in nominal terms, but on account of expenditure, the government has to pay more since the subsidy allocation will increase. So, in the backdrop of volatile international oil prices, subsidies should be designed and targeted rationally so that the consumption behaviour of end users remains unaffected; thus, the socio-economic development of the country is not impaired.

In the past, the burgeoning demand of non-renewable energy resources increased energy subsidy bill of the government, which also attracted global attention. However, in a developing country like India, the context of subsidy must be kept in mind as it is quite different from that of developed countries. Considering India's growing energy security concerns coupled with the increased efforts to enhance energy access, shifting to cleaner fuels, amongst other things, to impart the health benefits and to address climate change concerns, there is a need to understand the significance of subsidy for the overall welfare of economy.

The existence of certain subsidies causes fiscal strain on the exchequer and has also led to macroeconomic issues, such as crowding out of private investment in the respective energy sectors and inadequate allocation to social spending. For instance, in the coal-based thermal power plants for electricity generation, the subsidies can also hinder investments required at

the upper end of the value chain. Hence, the production of better washed coal will be impacted due to lack of investments which, in turn, could reduce the boiler efficiency and the quality of electricity generation. Moreover, if the coal is not washed, its transport cost to the thermal power plant goes up, which impacts the cost of power generation; this, in turn, impacts the consumers through higher price. The cost needs to be passed on to the consumers, failing which the revenue flow in the value chain is impacted. Therefore, it is important to understand the nature and extent of subsidies across the different fossil-fuel types and their value chains.

With this context setting the background on energy pricing, the succeeding sections of the report provide analysis of oil, gas, and coal subsidies and pricing. Section 2 chronicles the history of energy pricing related to oil and gas across the segments covered under the study, namely, crude oil, natural gas, LPG, and kerosene, followed by coal (power generation). Section 3 introduces the taxes and subsidies in the regime before the imposition of the goods and services tax (GST). Sections 4 presents an overview of each segment, and the subsequent section presents the analysis of taxes and subsidies across the segments covered under the study, including value chain diagrams for each segment. The value chain diagram also gives an image of supply chain, representing the product, producer, and consumer taxes, and subsidy inflow and outflow from/to central and state governments. The last section concludes.