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More Efficient Subsidy Scheme Benefits Consumers, Government, and Economy

By Roger Noll and T. N. Srinivasan

Designed appropriately, subsidies do not have to distort the economy. Consumers will buy more of a product sold at a low price even if the last units consumed have a correspondingly low value to them. By giving consumers cash instead of subsidized products, the government can deliver more value to low-income households while reducing the financial loss of subsidies, a win-win for all, say Roger Noll and T. N. Srinivasan.

A common feature of recent elections in India has been the competing promises to subsidize an ever-larger array of goods and services. The current manifestos of the DMK and the AIADMK for the Legislative Assembly elections in Tamil Nadu go

beyond the common promise to subsidize electricity, fertilizer and water and add rice and color television sets to the list. The rationale for subsidies is to help lower-income households.

Here we do not question the objective or budgetary feasibility of these promises. Instead, we propose a different method to provide subsidies, one that would reduce their budgetary impact and increase the benefits of the subsidy to recipients.

We first illustrate this approach for the proposed rice and TV subsidies and then discuss its implications for electricity and water, where the impact of the current methods for providing subsidies is

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nothing short of devastating for the long-term economic future of India.

Cash Component

We propose designing all subsidy schemes so that a consumer can receive a cash payment as well as buy a subsidized product. Consumers would receive credits equal to some fraction of a subsidy for which they qualify. These credits can be used to buy subsidized goods, but if at the end of a specified period not all of a recipient's credits are used, the recipient then is entitled to a cash payment equal to the remaining credit balance.

For example, consider the proposal to subsidize rice. The AIADMK proposes that each month a qualified consumer is entitled to 10 kg of rice free of cost and an additional 10 kg from the government at Rs 3.50 per kg. If the market price of rice is Rs 10.50 per kg, the total subsidy would be Rs 175 (Rs 10.5 per kg for the first 10 kg plus Rs 7 per kg for 10 more kg).

Under our proposal, a consumer would be entitled to buy up to 20 kg of rice at a higher, but still-subsidized price of, for instance, Rs 7.50 per kg, amounting to a possible subsidy of Rs 60. In addition, each consumer would be given a credit of Rs 115. This credit can be used

to cover Rs 6 of the price of a kg of rice (causing the consumer to spend an additional Rs 1.50). At the end of the month any unspent credit would be paid in cash to the consumer. When the credit is added to the difference between market and subsidized price, the maximum total subsidy is Rs 175, which is the same as the AIADMK proposal.

The important difference between these proposals is that under our scheme a consumer has a strong incentive not to buy 20 kg of subsidized rice. Because Rs 6 of subsidy is refunded if a consumer curtails rice purchases, the true cost of buying a kg of rice to a consumer would be the entire subsidized price of Rs 7.50, compared with Rs 3.50 under the AIADMK plan for consumers who buy between 10 and 20 kg. Facing higher prices, some consumers will decide that they would rather take the credit in cash and spend Rs 7.50 on other goods.

Lower Budgetary Impact

For every kg of rice by which consumption is curtailed, the government saves Rs 3 (the difference between the market price and the subsidized price).

Therefore, consumers are better off because they spend their last few rupees of credit on goods that are more valuable to them than rice, and the

government is better off because the total budgetary impact of the subsidy is lower.

Exactly the same scheme can be applied to the DMK proposal to give away free color TV sets. Suppose that a TV set costs the government Rs 1,500. Instead of giving the sets away, the government can set the price at Rs 1,000 and give each household a credit of Rs 1,000.

If the household uses its credit to buy the TV from the government, the subsidy cost to the government is the same, or Rs 1,500.

But if the household decides that it would rather spend Rs 1,000 on other goods and forgo the TV, the household can claim the credit, spend the money as it wants and in the process save the government Rs 500 in TV subsidy.

These examples assume that the government is in the business of selling subsidized rice and TV sets. Even more savings are likely if the government prints credits and allows consumers to use them to buy rice and TV sets from anyone.

Consumers could buy goods using a combination of cash and credits, and merchants could redeem the credits for cash or use them to pay taxes and electricity bills.

This approach saves the cost of maintaining a bureaucracy to

procure subsidized goods and reduces the budgetary impact of the program even more.

For Water and Power

Due to the crisis that India faces in managing its scarce water supply, the greatest potential benefits of our proposal come from changing the methods for subsidizing electricity and water to farmers. In much of India, water usage now exceeds average annual rainfall and is being maintained by pumping groundwater. As a result, water tables are sinking, and India risks turning some of its most fertile agricultural areas into deserts within a few years. In this circumstance, encouraging further extraction of water by giving water away and by subsidizing electricity to pump groundwater makes the problem worse by expanding water use when policy should be seeking to curtail it.

Usually the political debate in India is over whether water and electricity to farmers should be subsidized. But as our scheme makes clear, this is the wrong focus. Electricity and water can be subsidized in a manner that encourages conservation of water resources and that makes farmers better off than they are under the current subsidy regime.

For example, if a farmer pays Re 1 for electricity costing Rs 7

and consumes 1,000 kWh for pumping groundwater, the total subsidy amounts to Rs 6,000. However, what is the impact if the farmer receives a credit of Rs 4,000 and pays the still-subsidized price of Rs 5 but may use only Rs 4 of credit for each kWh of electricity? A farmer who cuts back electricity use to 800 kWh, for instance, would be entitled to a rebate of Rs 800, the amount of credit unspent.

Furthermore, the State Electricity Board would reduce its losses by not having to sell 200 kWh at a lower price, with a net budgetary benefit to the government of Rs 400. More importantly, since 200 kWh are not used to pump water, society as a whole benefits because groundwater is conserved.

We recognize that subsidies are not likely to disappear any time soon from the Indian economy, but subsidies do not have to distort the economy if they are designed appropriately.

Policymakers should bear in mind that if a product is sold at a very low price, consumers will buy more of it and that the last units consumed will have a correspondingly low value to them.

By giving consumers the opportunity to receive cash instead of subsidized products, the government can deliver more value to low-income

households while reducing the financial cost of subsidies, which benefits both consumers and the economy as well.