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Reforming Subsidies in Morocco

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The cost of the subsidy system in Morocco peaked at 6.6 percent of gross domestic product (GDP) in 2012, an amount larger than the country's total investment budget for that year. Direct subsidies to households in 2013 (October 2013 prices) are estimated at DH34.4 billion (US\$4.1 billion, or 3.9 percent of GDP). Replacing direct subsidies with a universal per capita annual cash transfer of DH749 (US\$90) would leave the poverty rate unchanged, while reducing direct subsidies to DH24.6 billion (2.8 percent of GDP). It is possible to reduce direct subsidies further by targeting only a part of the population, down to DH2.4 billion (0.3 percent of GDP), if only the poor were targeted. However, to implement selective targeting, the government of Morocco would need to substantially strengthen its social protection system.

Subsidies in Morocco

The subsidy system in Morocco dates back to the early 1940s. The first product to be subsidized was Liquefied Petroleum Gas (LPG), followed by sugar. For several decades, these two products were the only subsidized products in the country. The range of subsidized products started to expand in the 1960s, with the addition of cereals (1966), milk (1973), and cooking oil (1974). Prices for milk and cooking oil were later liberalized in 1983 and 2000, respectively, while LPG continued to be subsidized by means of an equalization system, whereby a special tax on liquid petroleum products (gasoline and diesel) helped stabilize LPG prices. Subsidies on liquid petroleum products have been introduced more recently, in conjunction with the global rise of oil prices in the early 1990s. The equalization system was abandoned in January 1995, and a price indexation system for liquid petroleum products was established to allow domestic prices to be adjusted to reflect changes in world prices. This new system became politically difficult to sustain given the persistence of

high oil prices throughout the 1990s and was eventually suspended in September 2000, paving the way for the rise in subsidies that followed.

Today, Moroccan subsidies are costly, inefficient, and are putting the medium-term sustainability of public finances at risk. Subsidies have reached unprecedented levels since 2008, peaking at 6.6 percent of GDP in 2012. For the first time, subsidy outlays became higher than capital expenditures, explaining most of the rise in budget deficits over the last few years. Worse, the fiscal space achieved through sound macroeconomic management during the previous decade has now totally eroded. As a result, Morocco's public debt has increased by more than 12 percentage points of GDP since 2008, reaching close to 60 percent of GDP in 2012. In addition, subsidies are putting the sustainability of the external accounts at risk by increasing and distorting domestic demand for fuels, given that the country is totally dependent on imports. After generating surpluses over 2001–6, the current accounts have suffered increasing deficits since 2008, peaking at 9.7 percent of GDP in 2012. The deterioration of the cur-

rent accounts has taken its toll on international reserves, which declined from an equivalent of eight months' worth of imports of goods and services in 2007 to less than four months in 2012.

The current price subsidy system in Morocco is universal and includes basic food products (sugar and flour) and petroleum products (gasoline, diesel, fuel-oil, and LPG). Its stated objectives are to ensure the price stability of targeted products, preserve the purchasing power of consumers, and help promote "promising" productive sectors to increase their contribution to the economy. In addition, given its welfare feature that helps control the prices of basic commodities (mainly food and LPG), the subsidy system constitutes a *de facto* social protection mechanism for low-income households.

The government of Morocco has publicly stated on several occasions its intention to radically reform subsidies by reducing them significantly or eliminating them altogether. The analysis that follows looks at the distribution of subsidies and the potential impact that total elimination may have on household welfare and on government revenues. This examination will provide some basic information that policy makers can use to better understand the implications of subsidy reforms. Finally, this note discusses recent reforms and some of the key issues that complicate subsidy reforms.

Who Benefits from Direct Subsidies?

Table 1 reports the official subsidized prices and estimates of unit subsidies and the unsubsidized prices published by the government of Morocco for all subsidized products as of October 2013. The list of products includes LPG, gasoline, diesel, sugar, and flour. Subsidies are particularly large for LPG, where

they account for 75 percent of the nonsubsidized price. Sugar and the low-quality flour (national) are sold at about half their free market price, while gasoline and better-quality flour (free) are sold at a price that is close to the free market price. Therefore, the relative importance of unit subsidies varies significantly across products, and this plays an important role in understanding the distribution of subsidies.

The distribution of subsidies across households depends on the unit subsidies and also on the relative consumption of subsidized products of each household. This analysis considers only the direct effects of subsidies on households. Subsidies also affect consumers indirectly—via the increase in prices of nonsubsidized products due to the increase in prices of subsidized products—and producers. Subsidies also affect the functioning of various markets, including the labor market. These effects can be very large of course, and should be analyzed within a general equilibrium framework, but in this note, analysis is limited to direct effects using the latest household consumption survey available in Morocco—the 2007 Living Standards Survey (LSS).¹ The survey information was updated to 2013 using macroeconomic, population and price statistics, so that all estimates presented here are for 2013, using October 2013 prices.

Table 2 shows that household expenditures on subsidized products are large, but also that subsidies associated with these products are almost as large. Moroccan households spend about DH38.9 million on subsidized products, about 7.7 percent of their total annual expenditures. Flour is the most consumed item in terms of expenditure (DH11.7 million) followed by LPG (DH10.9 million). Subsidies on the products considered totaled DH34.4 million, an amount almost as large as total household expenditures on subsidized products. In a nutshell, it is as if households are currently only paying—on average—half of what they should pay if subsidized products were freely exchanged on the market.

Subsidized products are relatively more important for the poor, as shown in figure 1 (left panel), where it is evident that the expenditure share of subsidized products is much higher for the very poor compared to the very rich. In the poorest households, more than 15 percent of their total expenditure is on flour, about 10 percent on LPG, and about 8 percent on sugar. Using the average for the poorest 20 percent of the population, results show that this group spends, on all subsidized products combined, 13 percent of its total expenditures compared to an average of only 4.3 percent for the richest 20 percent of the population. The only exceptions are gasoline and diesel, which are irrelevant items for the very poor. Interestingly, the rich spend between 2 and 3 percent of

Table 1. Prices of Subsidized Products (October 2013, Moroccan DH)

Product	Unit	Subsidized price	Unit subsidy	Unsubsidized price	Subsidized price as % of unsubsidized price
LPG	Liter	3.50	6.50	10.00	35.0
Gasoline	Liter	12.77	0.80	13.57	94.1
Diesel	Liter	8.84	2.60	11.44	77.3
Sugar, in pieces	Kg	6.00	5.00	11.00	54.5
Sugar, in cubes	Kg	6.00	5.00	11.00	54.5
Sugar, in granules	Kg	5.00	5.00	10.00	50.0
Flour, free	Kg	5.00	0.70	5.70	87.7
Flour, national	Kg	2.00	1.90	3.90	51.3

Source: Authors' compilation.

Table 2. Household Expenditures on Subsidized Products and Total Subsidies (DH millions)

Quintile	LPG	Gasoline & diesel	Sugar	Flour	Total expenditures	Total subsidies
1	1,416.4	76.4	1,108.8	1,721.4	4,323.1	4,952.3
2	1,702.8	312.9	1,343.7	2,249.0	5,608.3	5,789.3
3	2,126.3	558.1	1,489.2	2,402.0	6,575.5	6,622.7
4	2,353.4	1,479.8	1,648.4	2,822.1	8,303.7	7,323.6
5	3,273.4	6,446.5	1,790.4	2,545.1	14,055.4	9,693.6
Total	10,872.3	8,873.6	7,380.5	11,739.5	38,866.0	34,381.6

Source: Authors' compilation from 2007 LSS (updated to 2013).

their total expenditures on subsidized items across all subsidized products.

However, subsidies are clearly pro-rich in per capita absolute terms. Figure 1 (right panel) shows that LPG, flour, gasoline, and diesel are all pro-rich, with subsidies per capita higher for the rich than for the poor. For example, the richest households receive more than four times what the poorest households receive in per capita benefits, and the poorest quintile of the population receive on average only a little more than half of what the richest quintile receive. The only exception is flour, which benefits mostly the middle class. It is clear that the greater share of public expenditures on subsidies do not accrue to the poor, but to the rich.

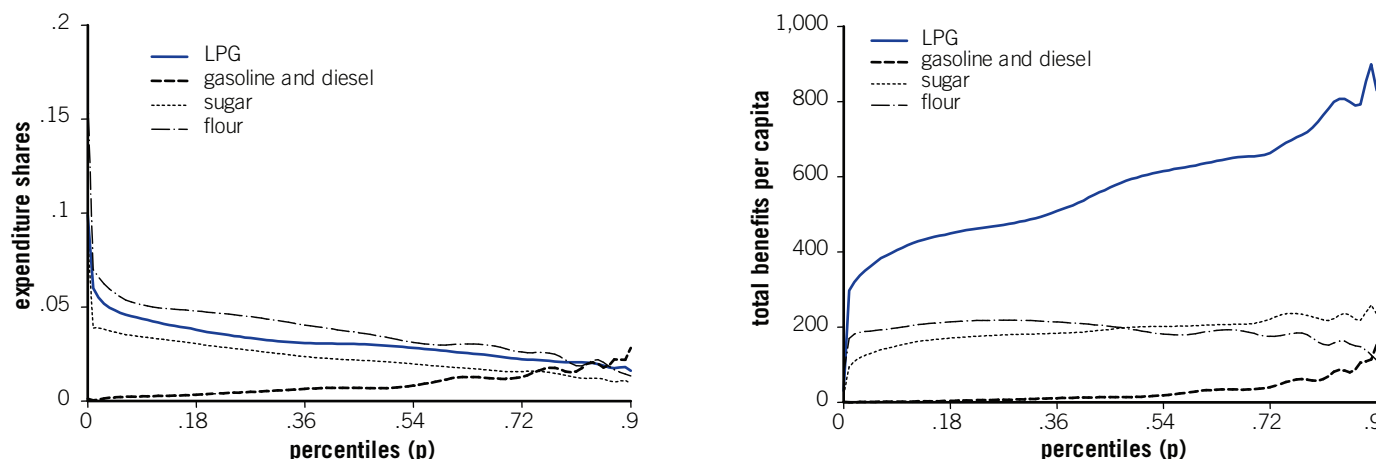
Impacts of Subsidy Reforms

The incidence analysis presented in the previous section shows that subsidized products are important for the poor, but mostly benefit the rich. Hence, a sensible reform would remove the subsidies from the rich and keep subsidies for the poor. Unfortunately, this is difficult to do because subsidies are not amenable to selective targeting. A more viable alternative would be to eliminate subsidies altogether and compensate the poor with a targeted cash transfer. This section pres-

ents a simulation that removes all subsidies and then shows prospective impacts of this removal on household welfare, poverty, and government budget. Potential impacts of compensatory cash transfers on poverty and government revenues are also considered.

The total loss in welfare and the total gain for the government can be estimated according to the total amount of subsidies, which amount to DH34.4 million or 6.9 percent of total household expenditure.

The impacts of the elimination of subsidies on poverty and inequality is also very significant. Estimations show that—with a poverty line of DH4,318 per person per year (US\$526 or US\$1.44/day)—the poverty rate would increase from 5.5 to 9.9 percent, while the Gini inequality measure would increase from 40.7 to 42.8 percent. These are very significant changes. Figure 2 (left panel) shows the impact of price increases of subsidized products on poverty at between 0 and 100 percent. Price rises in LPG, bread, and flour would increase poverty significantly, with flour being the most poverty-increasing product. Only increases in the price of gasoline and diesel have very small direct effects on poverty, for the simple reason that poor people do not typically own vehicles in Morocco.

Figure 1. Expenditure Shares on Subsidized Products (left) and Subsidies per Capita (right)

Source: Authors' illustration.

The impacts on government revenues are also significant, but quite different across products. For example, figure 2 (right panel) shows that LPG has the best potential to increase government revenues, while gasoline and diesel have less potential to increase revenues because prices are increased in percentage terms. Of course, equal increases in percentage terms correspond to different price increases across products, and certain products are closer to the market price than others, so not all products can be increased by the amounts shown (0–100 percent). However, figure 2 shows how impacts on poverty and government revenues are product specific, as well as possible trade-offs when it comes to reforming subsidies: for example, flour is the most poverty-increasing product, yet contributes relatively little to government revenues compared to LPG for the same percentage increases in prices.

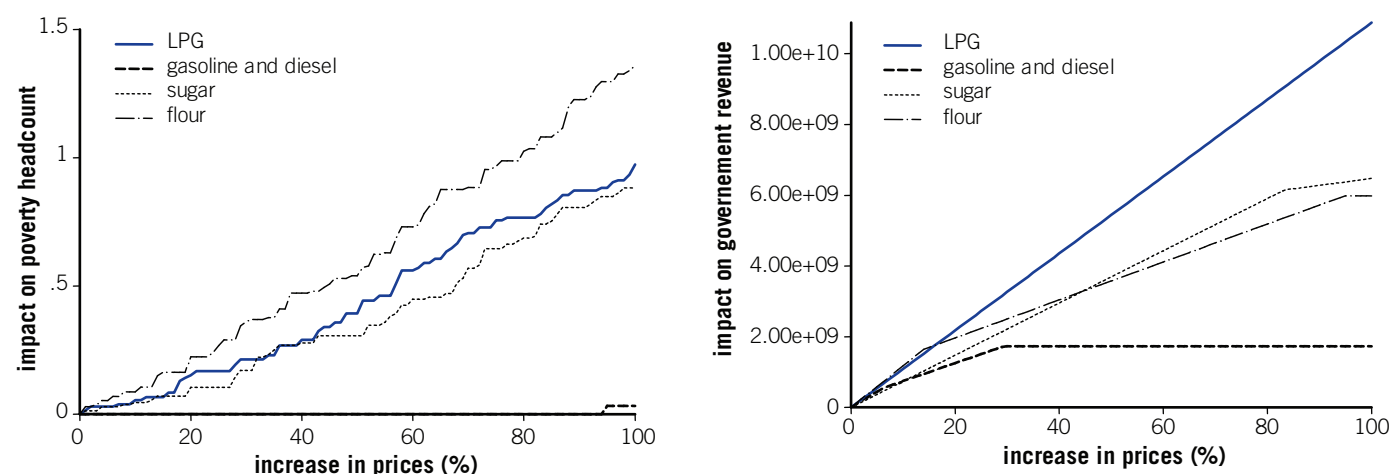
Finally, figure 3 shows the impacts on poverty and government revenues of a cash transfer designed to compensate the poor for the negative consequences of subsidy removal.

The x-axis plots the level of individual transfers, while the y-axis plots the headcount poverty index (left panel) and government revenues (right panel). The left panel shows that replacing direct subsidies with a universal cash transfer of DH749 (US\$90.40) would maintain the poverty rate, while reducing direct subsidies to DH24.6 billion (US\$3 billion or 2.8 percent of GDP). If only the poor were targeted, this cost would decrease further to DH2.4 billion (US\$0.3 billion or 0.3 percent of GDP). That is to say, providing a flat transfer to all would bring the poverty level back to its pre-reform level and be more efficient and less costly than providing a universal subsidy, and targeting only the poor and vulnerable would significantly reduce public cost even more.

Reforming Subsidies under Budget Constraints

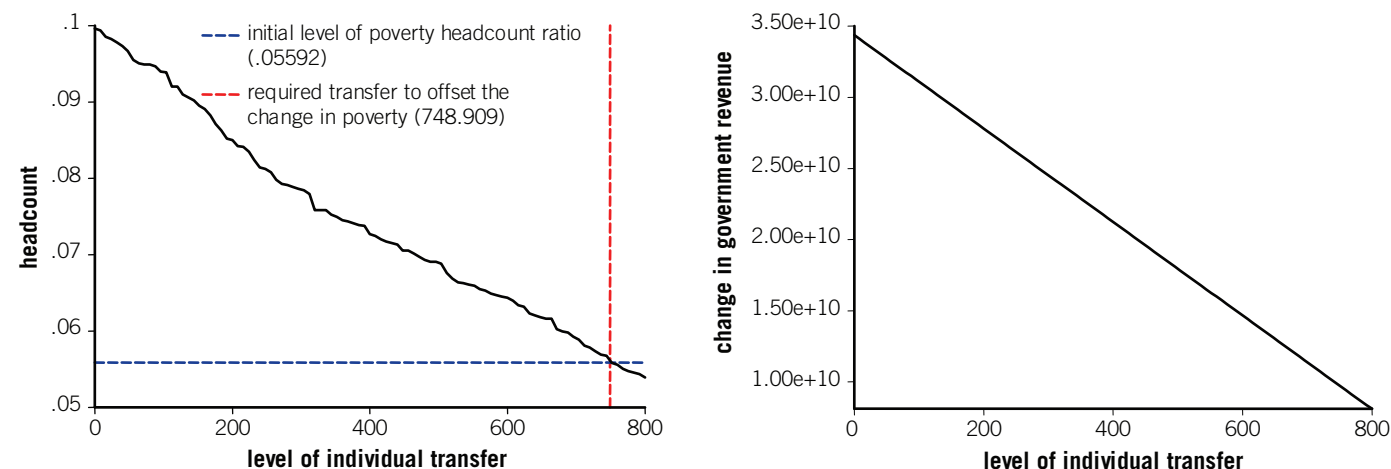
Reforming the subsidy system has become a high priority for the Moroccan government so that it can insulate public

Figure 2. The Impact of Price Changes on Poverty (left) and Government Revenues (right)



Source: Authors' illustration.

Figure 3. The Impact of Cash Transfers on Poverty and Government Revenues



Source: Authors' illustration.

finances from the negative effects of subsidized products' world price volatility while also generating fiscal space and reinforcing social programs that target the poor and vulnerable.

In 2013, the Moroccan government started to reform the subsidy system in line with the commitment to decrease the budget deficit to the sustainable target of 3 percent of GDP over the medium term. In addition to measures aimed at controlling the wage bill and other recurrent expenditures, and to rationalize capital spending, the government adopted a Head of Government Order (HGO) in the summer of 2013 allowing for a partial price indexation of selected domestic fuel products to changes in world fuel prices. Therefore, the government reintroduced the price indexation mechanism that operated between 1995 and 2000, although the new system differs from the previous one in that it is limited to a few products and uses only a partial indexation mechanism. The budget support for these subsidies is defined by the budget law. This is expected to be the first phase of a wider subsidy reform that could eventually extend the indexation system to other subsidized products, including food and LPG, while establishing a compensatory transfer system targeting poor and vulnerable families.

This first reform is expected to deliver some positive results on the budget side, but remains short of a full subsidy system reform. The estimations provided in this note show that the current subsidy system is vital for the poor, but clearly pro-rich and wasteful. A more efficient instrument to protect the poor and the vulnerable would be to completely eliminate subsidies and compensate the poor and vulnerable with a direct cash transfer. Estimates show that this approach would cost only a small fraction of current expenditures on subsidies. However, such reform remains politically difficult to implement and ultimately relies on an efficient system of targeting the poor and vulnerable, and it is unclear whether

Morocco has such a system in place. Targeting the poor and vulnerable with direct cash transfers implies an accurate knowledge of who is poor and where the poor are located, and collecting this information requires a complex nationwide exercise that Morocco has not yet implemented.

Moreover, food and commodity prices have been on the rise for over a decade and the expectation is that this trend will continue for the foreseeable future. This is a fact that puts the government budget and households simultaneously under pressure, leaving the government little space for maneuvering, especially during this period of fragile political reforms. These price increases already affect the poor and vulnerable via nonsubsidized products and highlight the need for a stronger social protection system. Hence, one way forward would be to focus on increasing the efficiency of public spending by removing subsidies and use the savings to reinforce the social protection system to protect the poor and vulnerable not just from the effects of subsidy reforms, but also from the wider effects of price increases. This requires a substantial reform of the social protection system.

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Note

1. www.hcp.ma.

Reference

Araar, A., and P. Verme. 2012. "Reforming Subsidies: A Toolkit for Policy Simulations." World Bank Policy Research Working Paper No. 6148, Washington, DC.