

The Egyptian Food Subsidies System and Households' Welfare: Micro Econometric analysis of the Wheat Sector

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Abstract

Egypt has adopted a major food subsidy system that plays an important role in providing basic commodities for the poor households, especially in a context of rising foodstuff prices such as the one happened in 2008.

This system suffers from major problems; high budget, not well targeted, leakage and insufficiency, that discussion about its elimination and the application of the income transfer has been for long time, till now, a major topic for the Egyptian policy makers. The food subsidy system represents a social contract between the government and the Egyptian population, mainly the poor. It is crucial for the food security and the social stability of Egypt. For this reason, its elimination has been, almost, impossible to apply. Therefore the improvement of the system is essential and highly required.

The main commodity of this system and we can also say its main problem, is what the Egyptian called the “*baladi* bread”; it is the major staple crop in the Egyptian diet. However, the low wheat self sufficiency rate in Egypt make the system vulnerable to the fluctuation of the international wheat price, given that Egypt is the second largest wheat importer worldwide.

The Egyptian food subsidy system, mainly the baladi bread and the Egyptian wheat sector are the topics addressed in this thesis. We studies the behaviour of the different agents involved in the different levels of the wheat-to-bread chain and analyzes the impacts of the various suggested policies on these agents' welfare.

The aim of this research is to answer the main question of interest for the Egyptian government; how to improve the system to reduce its budget without negatively affecting the social justice and the poor welfare.

Our results show that the reform of the food-subsidy policies should be done at all the levels of the system. Changing the tax policy in just one level, may affect negatively the agents of this level, without having a positive impact on the other levels or on the whole system.

The thesis is organized as follows:

Chapter 1 presents Egypt, its economy and its safety net program mainly the food subsidy program. The historical background of the food subsidy system since its implementation after the Second World War and how it is operating and what are the new changes that occurred to respond to the recent food crisis are described. **Chapter 2** applies a Mixed Demand approach to analyze the consumption structure of Egyptian households. Our model specification allows us to take into consideration the specification of the Egyptian subsidy system, with some food items having predetermined quantity quotas (sugar and oil) while others (bread and flour) have predetermined (subsidized) prices. Price, income and quota elasticities are estimated from an Egyptian Households Survey (EIHS1997) and welfare change measures are derived for several income quintiles.

Chapter 3 presents a net impact measure for the impact of the rising wheat price on the producers' welfare. This measure takes into consideration the wheat consumption as well as production of the agricultural households. Input demand, output supply

elasticities and the net impact measure are estimated using the Egypt Wheat Producer Survey (EWPS, 1997-98). Our results show that ignoring the revenue effect of the increase price over-estimate the negative impact on these households.

Chapter 4 uses an industrial-organisation (IO) model to study the structure of the wheat-to-bread chain taking into account all its agents: farmers, millers, bakeries and final consumers. We estimate the input demand elasticities and the output supply elasticities for each level using the EHS (1997) for the consumers and the bakeries, the EWPS (1997-98) for the wheat farmers and the Egypt Milling Sector Survey (WMS, 1997) for the millers. The Egyptian Government intervention in all the stages of the chain prevents the economic forces of playing their expected roles, which make the change in only one stage is not as beneficial as expected. The impacts of the liberalization of the mills market are estimated as well as the impacts of liberalization of the entire production chain.