Conférence de personnes ressources invitées

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"Groundnuts Export Tax in Senegal: Winners and Losers"

Since the 2007-08 food crisis, several countries have placed restrictions on international trade of agricultural and food products. Export taxation policies have moved from ninth to fifth place in the list of the most used protectionist measures (Evenett 2009, 2012). The impact of the export taxes depends mainly on the country's importance in the international market of the concerned product (Zambersky and Cajka, 2015). Senegal used to be a major player in the international groundnut market. The country was the world's second largest exporter of groundnuts in the 60s, controlling about 18% of the total volume of exports. In early 70s, the country started to experience a drastic drop in its contribution to world groundnut market, with less than 1% of the world volume traded annually over the period 2010-2013. Despite its decline in the world groundnut market, the groundnuts industry remains a pillar of the agricultural sector in Senegal.

Groundnut production is the main source of income for farmers and occupies 39% of cultivated area and more than half of the rural labor force. Groundnut accounts for 8% of total agricultural production and 79% of cash crop production. The production is primarily used as intermediate consumption by the processing industry (60%) and as final consumption (32%). Thus, a small proportion (8%) of groundnut production is exported. So far marginal, groundnut exports have increased substantially in recent years from 3,904 tons in 2010 to 26,635 tons in 2013. This new dynamic in groundnut exports seems to be the reason why an export tax on groundnut has been implemented in the 2017 Finance Act.

This study contributes to understanding the distributive effects of the groundnut export tax in Senegal. The impact of the groundnuts export tax is simulated by a Computable General Equilibrium (CGE) model applied to the Senegalese economy. The framework builds up on a static comparative Walrasian small open economy model, i.e. competitiveness on the commodity markets and exogenous international prices. The model is investment-driven, i.e. aggregate saving adjusts to aggregate investment. Considering the ratios of external saving and public savings relative to GDP are fixed, private saving adjusts to aggregate investment. The following macroeconomic closures are adopted:

Short run period: real wages are rigid and excess labor supply, and fixed industry-specific capital and total factor productivity (TFP).

Medium run: flexible wages rate as labor supply adjusts to labor demand across industries, and adjusting industry-specific capital and TFP.

The analysis establishes a relationship between industry-specific TFPs and public capital stocks using the elasticity of private output with respect to public capital stocks. The production technology that includes public capital stocks is used to specify its symmetrical equivalent that allow flexible industry-specific TFPs. The CGE model is calibrated to Senegalese economy using Senegal's Social Accounting Matrix for 2011 (Fofana, Diallo, Sarr, and Diouf, 2015). The SAM is then adjusted to reflect the Senegalese macroeconomic features in 2015 and to lay out the groundnut production and processing industries.

The 2017 Finance Act implemented an export tax on groundnut at the rate of 15 CFA francs per net kilogram for unshelled groundnuts and 40 CFA francs per net kilogram for shelled groundnuts. The corresponding relative rates for unshelled groundnuts and shelled groundnuts are 4% and 10%, respectively, based on the average export prices applied between 2011 and 2015. The study tests a 10% export tax rate since Senegal primarily exports shelled groundnuts (more than 80% over 2010-2014). The effects of the tax are assessed in the short run and the medium run successively. Findings indicate that the primary losers and winners of the export tax are the groundnut producers and processors respectively.

The implementation of the groundnut export tax primarily affects groundnut producers. Since Senegal is a "small economy" in the international groundnut market, the export tax does not affect the world prices of groundnuts but rather reduces producer prices and, therefore, the production level. Consequently, groundnuts export decreases and local supply increases. Groundnut is the main input to the groundnut oil refinery. The export tax boots the groundnuts processing industry because of the increase in local market supply and the decrease in the cost of groundnut (input). Exports of refined groundnut oil increase but does not compensate for decline in groundnuts exports, leading to a depreciation of the exchange rate. Other industries win or lose from the implementation of the export tax. Thewinning industries appear to be the most exposed to external trade (exports and/or imports). They improve their price competitiveness on the external and domestic markets as the exchange rate depreciates. The losing industries are the non-tradable services without or with little interaction with external markets. Overall, the export tax reduces the performance of the agricultural sector in the short and medium run. In opposite, a positive impact on the non-agricultural sector is observed in the medium run and, consequently, generating a positive economywide effect. The household well-being is assessed through the change in final consumption. The well-being of rural households deteriorates in the short and medium run with the implementation of the export tax. On the contrary, the well-being of urban households improves in the medium run. The induced rural and urban impacts are driven primarily by the income-effect of the groundnuts exports tax.

When, the extra-revenue collected by the Government from the groundnuts export is used to compensate the groundnuts producers throughout a productivity increase, the winners-losers gap widens. Although, the productivity-increased spending scenario contributes to mitigate the groundnuts production lost, it boosts production and exports of the groundnuts processing industry. As refined oil exports increase and compensate for decreasing groundnuts exports, the exchange rate appreciates and wipes off the medium run positive economywide effect. Consequently, both rural and urban households' well-being deteriorate and the urban-rural gap widens.

A sensitivity analyses performed on key elasticities (private output-public capital stocks and external trade) reveal consistent (negative) results of the export tax on groundnuts producers. However, the results on groundnuts processors are ambiguous and closely related to the magnitude of the (negative) impact on producers.

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