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Tradeoffs between income distribution and welfare: The case of Turkey's integration into the European Union

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Abstract

The welfare and income distribution impacts of Turkey's international agricultural trade policies and integration into the EU are analyzed using Political Preference Functions together with the strategic trade setting to determine the potential for Pareto improvements. Results show that Turkey exhibits a preference to integrate with the EU from a welfare perspective, but that income distribution within the agricultural sector becomes less equal with the integration. Results also indicate that a Pareto optimal solution does not imply an equitable solution for the parties involved. Therefore, income distributional effects should be evaluated in policy analysis given that trade policies also affect the distribution of welfare within an economy as it affects the welfare of various interest groups.

JEL classification: F15; Q170; C72

Keywords: Economic integration; Income distribution; PPF; Pareto optimality; Strategic trade

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1. Introduction

The trade-off between supporting farmers and providing cheap and sufficient agricultural products for low-income consumers is a major dilemma for many countries. At the same time, the incomes of various producer groups within agriculture can vary depending on political power and lobbying. New and developing trading blocs and accompanying multilateral trade negotiations aiming at freer trade require that policy makers face new problems given dynamic domestic and international policy linkages. Turkish agricultural policies are aimed at providing a standard level of income in the agricultural sector. However, as a member of the World Trade Organization (WTO), Turkey has agreed to reduce its tariffs and other protection levels (GATT, 1994). At the same time, the European Union (EU) continues to expand and Turkey is eager to be part of this union. The EU plans to reform its agricultural policies to become more competitive and to comply with the WTOs rules (Ingersent et al., 1998). These scenarios will have considerable impact on Turkish agriculture through changes in producer and consumer welfare. These policies will also affect the income distribution within the agricultural sector. This research analyzes the welfare and distributional effects of Turkish agricultural trade policies in a post-Uruguay Round environment through the use of a Political Preference Function (PPF) and the Gini coefficient (GC). In this way, policy makers can weigh the effects of agricultural policies and the accompanying trade liberalization among agricultural producers and between producers and consumers. The outcomes of this study can contribute to policy design when policy makers face the multiple policy criteria, in this case the welfare and income distribution effects of agricultural policy. Policy makers can identify alternative policy options that allow for the simultaneous improvement of welfare and income distribution, and the set of optimal policy options can be expanded.

2. Background and theoretical model

Single-country PPFs have been utilized in several studies. Rausser and Freebairn (1974) apply the PPF to analyze U.S. beef import policy. They analyze the welfare effects of beef trade policy on the consumer in terms of the cost of a market basket of meat commodities. Oehmke and Yao (1990) estimate a policy preference function that explains the government's choices of target prices, government held wheat stocks, and level of public wheat research funding for the US wheat market. Abler and Sukhatme (1998) model the determinants of Indian wheat and rice policy using the PPF. They examine the policies toward international trade, grain procurement, public grain distribution, and production inputs. In a multicountry study, Johnson, Mahe, and Roe (1993) conducted an empirical analysis using the PPF. They measured the role of special interests in the US and the EU. Their analysis searched for mutually acceptable agreements in trade negotiations between these two blocs using the world trade model. Agricultural trade policy interdependence is also modeled by Kennedy, von Witzke, and Roe (1996) using a game theoretical framework and PPF. The model distinguishes between the EU, the US and a politically passive rest of the world. From an income distribution perspective, there have been some studies that analyze income disparities in the agricultural sector (Knigma & Oskam, 1987; von Witzke, 1979).