

# ESSAYS IN POLICY ANALYSIS: STRATEGIC TRADE THEORY AND THE ELIMINATION OF AGRICULTURAL SUBSIDIES By JEFFREY ALLEN LUCKSTEAD

Committee: [Ron C. Mittelhammer](#), Ph.D., Co-Chair Stephen Devadoss, Ph.D., Co-Chair and [Mark J. Gibson](#), Ph.D.

Abstract: The purpose of this dissertation is to advance the understanding of the impacts of trade and domestic policies on production, trade, welfare, and productivity. The first chapter summarizes and extends the New Empirical Industrial Organization (NEIO) literature by showing that the cost function specification plays a crucial role in identifying the market power parameter in both autarky and trade models.

The second chapter uses a strategic trade policy framework and the NEIO literature to analyze the oligopolistic competition between U.S. and Chinese apple exporters in the Association of Southeast Asian Nations (ASEAN) and in their domestic apple markets. A theoretical model is defined and quantitative results are derived for changes in ASEAN tariffs on imports of U.S. and Chinese apples and the latter countries' subsidies. A structural econometric model is estimated and simulated to quantify the effects of changes in the tariffs and subsidies on trade flows, price, and welfare.

The third paper develops a strategic trade model based on the new trade theory to analyze competition between Florida and São Paulo processors in the U.S. orange juice market and São Paulo processors in the European orange juice market. Comparative static results are derived to analyze the effect of a reduction in the U.S. and European tariffs on sales and welfare in the United States, São Paulo, and Europe. A structural econometric model is specified, and the NEIO literature is utilized to identify the market power parameters. The estimated structural model is simulated to quantify a reduction in the U.S. and European tariffs.

The fourth chapter analyzes the short- and long-run effects of various subsidies by developing a dynamic general equilibrium model with firm-level productivity shocks and endogenous entry and exit. Measurement statistics are specified for welfare, real gross domestic product, and total factor productivity to make the analysis resemble the data-based measurements macroeconomist typically implement. The model is calibrated to a general and widely accepted set of functional forms and parameters. The impacts of the elimination of subsidies are quantified by numerically solving the model for both steady state values and equilibrium transition paths for the above measurement statistics.