

## **MANUFACTURED GOODS, MEATS AND GRAINS: ALTERNATIVES TO A BILATERAL AGREEMENT BETWEEN MERCOSUR AND CHINA**

Topic: CGE & Trade

Author: ADRIANO MARCOS RODRIGUES FIGUEIREDO

Co-Authors: Cláudio Eurico Seibert Fernandes da Silva, Mayra Batista Bitencourt Fagundes, Leonardo Francisco Figueiredo Neto

This study questions: what would be the economic impact of a bilateral agreement between MERCOSUR and China for the Brazilian macro-regions? The main hypothesis is that with the advent of this bilateral agreement the Brazilian agribusiness and the Chinese manufacturing sector would benefit. On the other hand, this agreement also can adversely affect some sectors or regions of these economies. This study aims to identify a possible bilateral agreement between Mercosur and China and their respective impacts on their economies. Specifically the goals are: a) to identify a possible preferential trade agreement between MERCOSUR and China; and b) to analyze the economic impacts in terms of GDP; household consumption; investments; public finances among other macroeconomic aggregates, arising from the proposed agreement. Input-Output matrices are at the core of the GTAP Data Base, and then to the GTAPinGAMS framework, which is used to build the General Equilibrium Model PAEG. The main features of the PAEG are the disaggregation of the five Brazilian macro regions, with 19 activities and other 7 regions (Rest of Mercosur, USA, Rest of Nafta, Rest of Americas, European Union, China and Rest of the World). As Brazil and China have a significant trade, which differs among Brazilian regions, this addition to the GTAP 9 Data Base, 2011 base year, allows users to more easily use and adapt the model with GTAPinGAMS. To this end, we used the General Equilibrium Model PAEG for conducting tariff reduction scenarios of 25%; 50% and 75% of the Mercosur agribusiness products such as soybeans and corn (OSD scenario) and meat (OAP scenario), together with the Chinese manufacturing sector (MAN scenario), with disaggregation in households into ten income tracts. We used a pay-off game matrix setting in order to detect the best tariff reduction scenario. The main results were that a tariff reduction scenario of 75% in the meat industry in Brazil and manufactured in China have the best results for the Brazilian economy, since the agreement (OAP / MAN) holds the highest GDP growth rate and reaches more positively industries. However, the best scenario for the Chinese economy was the agreement involving (OSD / MAN) Brazilian soybeans with the manufacturing sector in China, as it presented the best indices for the Chinese economy. China would have increase in consumption, government expenditures, exports, imports and GDP. Brazilian regions would in general gain in consumption, investment, exports, imports and GDP. The Brazilian regions' government expenditures would decrease, what can be seen as a good result either. It is detected that 47 from 50 Brazilian household income tracts would be better off with the agreement.