

EFFECTS OF TRADE BARRIERS ON BRAZILIAN SOYBEAN AND MEAT: The cases of China, EU and US embargoes

Topic: CGE & Trade

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The Brazilian trade flows have increased in recent years, even with high tariffs and nontariff trade barriers. This study questions: how changes in trade policies impact the Brazilian regions and the world? Liberal trade policies and trade agreements may favor some sectors more than others, independent of having gains to the overall Brazilian economy. On the other hand, trade barriers can adversely affect some sectors or regions. We evaluate the effects of the embargo imposed on Brazilian beef and soy. Specifically we analyze the regional trade in Brazil and its main indicators such as production, prices of commodities and factors, GDP, and welfare. The analytical model is based on a computable general equilibrium model called PAEG that allows the analysis of the Brazilian regions, their relationships with other countries or economic blocks, using the database GTAP version 9. 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 model 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. The scenarios included a possible Chinese embargo on Brazilian grains and oilseeds; and a possible embargo from European Union (EU) or the United States (USA) (separately) over Brazilian animal products. The idea is to simulate a complete trade barrier in the selected product, say grains or animal products. The model is easier to implement simulating a tariff as high as the trade flow would disappear between Brazil and China, Brazil and the EU, Brazil and USA. The results show that the Chinese embargo on Brazilian soybeans would lead to a decrease in consumption of soybeans in China of about \$ 750 million. For regions in Brazil there was a reduction in exports (-USD 250 million) in the Midwest, but increased exports from the Southeast (USD 690 million), mainly of manufactured goods and clothing. As for the embargo by the EU and the U.S. Brazilian beef, shows that the impacts are smaller than those resulting from the Chinese embargo on Brazilian soybeans. The U.S. embargo would cause more damage than the European. The U.S. faced losses of welfare, making it more sensitive than the European Union in relation to Brazilian beef.