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Impacts of the Doha Round on Brazilian, Chinese and Indian agribusiness☆

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ABSTRACT

The central themes to be addressed during the Doha Round of the world trade negotiations are the reduction of the agricultural production and export subsidies and improved market access for agricultural and non-agricultural goods. The G-20 group wields enough power to press negotiations at the Doha Round toward lower agricultural trade barriers and production and export subsidies. The objective of this study is to determine the impacts of the Doha Round on the economies of Brazil, China, and India. The Global Trade Analysis Project's (GTAP) general equilibrium model and database (version 7) are used. The Doha Round scenarios simulated in this paper consider the WTO agricultural production and export subsidy reduction requirement, and the application of the Harbinson approach, and Swiss formula to reduce import tariffs. Brazil and China present the highest GDP growth rate varying from 0.4 % to 1.4%. India shows a negative GDP growth rate in all scenarios, except in that which replicates the Uruguay Round. The welfare gains are positive, but small, for Brazil, China and India. The GDP loss observed in the economies of the EU25 and the US may make it difficult to reach a trade agreement at the Doha Round.

1. Introduction

The World Trade Organization (WTO) initiated in 1999 a revision of the Uruguay Round Agreement aimed at discouraging trade-distorting domestic support, non-tariff barriers, and reducing direct export subsidies, among other things. The revision meetings led to the Doha Round in Doha, Qatar, in 2001. One focus of the Doha Round was the easing of agricultural commodity access into the world market by reaching an agreement regarding the three controversial agricultural themes: the reduction of tariffs on imported agricultural goods, and the reduction of agricultural production and export subsidies.

Due to the nature of agribusiness, developing countries are burdened with high import tariffs. To make matters worse, the agricultural sector is the only sector still subsidized. These two facts are strong justifications for the improvement of the agricultural market and for the implementation of reduced subsidies within importing countries.

The G-20[2] currently plays an important role at the Doha Round. Created at the Cancun meeting in 2003 to serve as a trade bloc representing all developing countries, the G-20 now wields enough power to press negotiations at the Doha Round toward lower

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1 Tel.: +55 31 3899 1339.
2 A group of 21 less developed countries involved in negotiations with the WTO. A group of the 20 largest industrialized economies plus emerging countries created in 1999 also is called G-20, but it is not examined in this paper.

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agricultural trade barriers and a decrease in the agricultural production and export subsidies. There are currently 21 members in the G-20: 10 Latin American countries — Brazil, Mexico, Argentina, Uruguay, Paraguay, Venezuela, Chile, Bolivia, Guatemala and Cuba; 6 Asian countries — China, India, the Philippines, Indonesia, Pakistan and Thailand; and 5 African countries — South Africa, Egypt, Nigeria, Tanzania and Zimbabwe. The regions that make up the G-20 account for approximately 60% of the global population and have risen significantly in terms of exports over the past decades; especially the developing Asian countries, which accounted for almost 25% of all exports in 2000 (Fig. 1). In terms of agriculture, the G-20 accounts for 70% of the world's agricultural population and 26% of total agricultural exports (G20, 2007).

The G-20's vast and balanced representation put it in a strong position when negotiating agriculture related issues. This strength was proven when the G-20 was able to negotiate a deal with developed countries at the sixth WTO Ministerial Conference (Hong Kong, 2005) fixing a deadline for the elimination of agricultural export subsidies.

Brazil, China and India have a special interest in the results reached at the Doha Round. They have achieved substantial growth in the international trade market and their agribusiness trade activities are concentrated in the export of soy, coffee, maize, meats, sugar and cotton. These three countries' path to growth is associated with the capacity and strength of the G-20 to format a multilateral agreement that will allow for the unrestricted access of agribusiness products into the world market.

China, India, and Brazil have vast agricultural resources and their economies rely on agriculture and agribusiness to a great extent. China is the fourth largest economy in the world. Its economy grew at an average rate of 10% from 1990 to 2005, and is among the world's largest producers of rice, corn, wheat, soybeans and vegetables. Half of its labor force is employed in agriculture. China's main crops are paddy rice, maize, sweet potatoes, wheat, and sugar cane; however, its major exports are electrical and mechanical machinery and equipment, apparel and apparel accessories, and consumer durables. In 2004 its total export was US$ 593.3 billion.

India is the twelfth largest economy in the world and the third largest within Asia. It is also the world's fourth largest agricultural power, with 20% of its Gross Domestic Product (GDP) derived from agriculture, and is among the leaders in the export of milk, fruits, vegetables, wheat, rice, tea, cotton and sugar. Its main crops are sugar cane, paddy rice, wheat, potatoes and bananas. Still, India's main exports are jewels, mineral fuels, clothing, textiles, and organic chemicals. Furthermore, it has a strong potential in the exports of services. Its total exports were US$ 75.6 billion in 2004.

Brazil is the tenth largest economy in the world. It is the world's leading producer of coffee, sugar cane and oranges. Brazil's main agricultural products are soybeans, meats, sugar/ethanol, coffee, maize, manioc, tobacco and oranges. Just like China and India, Brazil's main exports are not related to agriculture; instead, they are vehicles, machinery, iron and steel, and ores (WTO, 2008). Agriculture constitutes 10% of Brazil's GDP and agribusiness accounts for 28.2% of its US$ 96.5 billion total in 2004.

All three countries have much room to grow in terms of agricultural product exports. The depreciation of the Brazilian *Real* since 1999 has stimulated exports. India has a high unemployment rate and 25% of its population lives below the poverty line. The reduction of international agricultural trade barriers could help India employ more citizens in agriculture and agribusiness. China already employs half of its inhabitants in agriculture related jobs; but this does not show up in its export list, demonstrating room for growth in the export of agricultural products. All three countries could benefit greatly from the potential trade reforms reached at the Doha Round.

Since July 2008, when the representatives of Brazil, India, the U.S. and the European Union met in Geneva, negotiations have been stalled. At this meeting, India decided to withdraw from the negotiations due to the impasse on the issues of subsidies to agricultural production and tariffs on imports, which led to the negotiation's failure. The new deadline set for the agreement is 2013.

There are many published papers that address the potential reduction of agribusiness product trade barriers at the Doha Round. Some influential papers include those by Harrison, Rutherford, Tarr, and Gurgel (2003), Cline (2003), Conforti and Salvatici (2004) and more recently by Gurgel (2001), Antimiani, Conforti, and Salvatici (2006), Anderson et al. (2006), Ferreira Filho and Horridge (2006) and Polaski (2006). Yet, there is still a need for current information on the different economic impacts that could arise from the implementation of the Doha Round multilateral trade agreements.

Such studies have demonstrated high potential gains to developing countries by the reduction or elimination of trade barriers in agricultural markets. Cline (2003) notes that the impacts of trade policies can help reduce poverty in developing countries. He

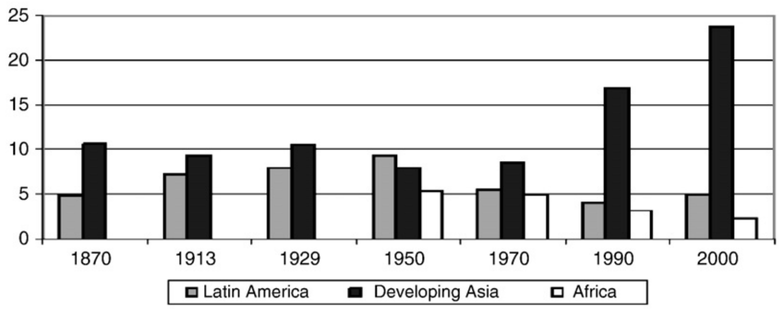

Fig. 1. Participation by Latin America, developing Asia, and Africa in global exports (%). Source: IOS (2005).