

Impact of the Doha Round on Developing Countries:

PRELIMINARY FINDINGS FROM
A GLOBAL GENERAL EQUILIBRIUM MODEL

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Overview of Our Study

- Economic model commissioned by Carnegie
- Utilizes newest global trade data and trade patterns
- Models skilled, unskilled, and agricultural labor markets separately for developing countries
- Includes unemployment in developing countries

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Overview of Results

- Impact of Doha liberalization very different for different developing countries
- Importance of sectors beyond agriculture for broad-based gains to developing countries
- Minimal cost to developed countries of special treatment for defensive agricultural interests of developing countries

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Global Real Income Gains: Full Trade Liberalization Compared to Plausible Doha Scenarios

MODEL	FULL LIBERALIZATION	PLAUSIBLE DOHA SCENARIO ^a	WORLD BANK DOHA SCENARIO WITH 2% "SENSITIVE" AND 4% "SPECIAL" PRODUCTS
Current World Bank model ^b (Dynamic Gains)	\$287 billion	\$96 billion 33%	\$39 billion 14%
Carnegie model ^b (Comparative Static Gains)	\$168 billion	\$59 billion 35%	\$59 billion 35%

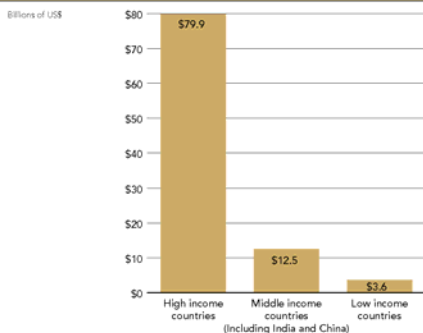
a. Kym Anderson, William J. Martin and Dominique van der Mensbrugghe, "Market and Welfare Implications of Doha Reform Scenarios," in *Agricultural Trade Reform and the Doha Development Agenda*, ed. Kym Anderson and William J. Martin (Washington, D.C.: World Bank, November 2005).

b. Carnegie Endowment for International Peace (forthcoming).

c. In the World Bank model, the scenario is based on a tiered formula. Resulting average agricultural tariff reductions are 44% by developed countries and 21% by developing countries. The corresponding reductions for manufactured goods are 50% and 33%. In the Carnegie model, labeled in subsequent figures as "Carnegie Central Doha Scenario," agricultural tariffs are reduced on average by 50% by developed countries and 24% by developing countries, whereas the corresponding reductions for manufactured goods are 50% and 33%. Least developed countries do not make tariff reductions in either model.

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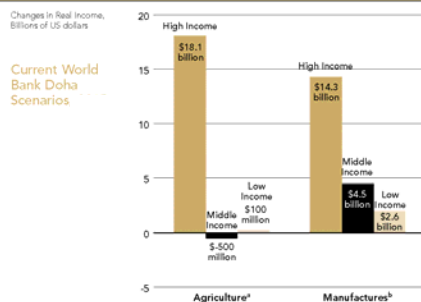
Global Real Income Gains from World Bank Doha Scenario, 2015



Source: Kym Anderson, William J. Martin and Dominique van der Mensbrugghe, "Market and Welfare Implications of Doha Reform Scenarios," in *Agricultural Trade Reform and the Doha Development Agenda*, ed. Kym Anderson and William J. Martin (Washington, D.C.: World Bank, November 2005), Table 12.14.

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Who Gains, From What? (I)



Source: Kym Anderson, William J. Martin and Dominique van der Mensbrugghe, "Market and Welfare Implications of Doha Reform Scenarios," in *Agricultural Trade Reform and the Doha Development Agenda*, ed. Kym Anderson and William J. Martin (Washington, D.C.: World Bank, forthcoming). Calculated by author from data in table 12.14.

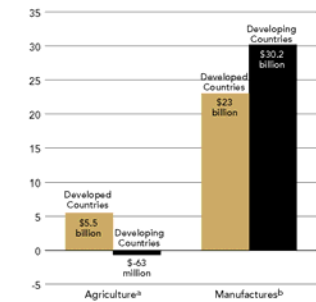
a. World Bank Scenario 2 with tiered reduction formula, 2% "sensitive" products and 4% "special" products.
b. World Bank NAMA Scenario with cuts to tariff bindings of 50% by developed countries, 33% by developing countries and no change by least developed countries.

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Who Gains, From What? (II)

Changes in Real Income, Billions of US dollars

Carnegie Doha Scenarios

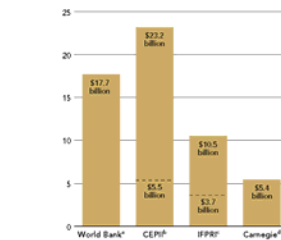


- a. Carnegie Doha scenario for agriculture includes 36% agricultural tariff reduction by developed countries, 24% by developing countries, elimination of export subsidies, reduction of domestic agricultural support by one third, and no change by least developed countries.
- b. Carnegie Doha scenario for manufactured goods includes 50% tariff reductions on manufactured goods by developed countries, 32% by developing countries, and no change by least developed countries.

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Global Real Income Gains from Agricultural Liberalization: Comparison of Major Models

Changes in Real Income, Billions of US dollars

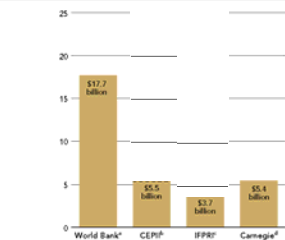


- a. Kym Anderson, William J. Martin and Dominique van der Mensbrugghe, "Market and Welfare Implications of Doha Reform Scenarios," in *Agricultural Trade Reform and the Doha Development Agenda*, ed. Kym Anderson and William J. Martin (Washington, D.C.: World Bank, November 2005), Table 12.14.
- b. Scenario includes varied tariff reductions similar to World Bank, no "sensitive" products and a reduction of 55% in domestic subsidies. Antoine Bouet, Jean-Christophe Bureau, Yann Decoux and Sébastien Jean, *Multilateral Agricultural Trade Liberalization: The Contrasting Fortunes of Developing Countries in the Doha Round*, CEPR Working Paper 2004-18, Paris: Centre D'Etudes Prospectives et d'Informations Internationales, November 2004. Calculated by author from data in Table 6. **CEPR model does not include GTAP 6 data.**
- c. IFPR scenario is full liberalization; total gain would decline significantly in a more realistic Doha scenario. Xinshen Diao, Eugenio Diaz-Bonilla, Sherman Robinson, and David Orden, *Tell Me Where It Hurts, An 'F' Tell You Who To Call: Industrialized Countries' Agricultural Policies and Developing Countries*, MTID Discussion Paper No. 04, (Washington, D.C.: International Food Policy Research Institute, April 2005), Table 10.
- d. Carnegie Doha Agriculture scenario with 36% agricultural tariff reductions by developed countries, 24% by developing countries, elimination of export subsidies, reduction of domestic agricultural support by one third, and no change by least developed countries.

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Global Real Income Gains from Agricultural Liberalization: Comparison of Major Models

Changes in Real Income, Billions of US dollars



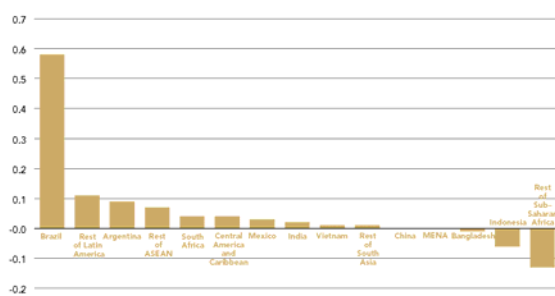
- a. Kym Anderson, William J. Martin and Dominique van der Mensbrugghe, "Market and Welfare Implications of Doha Reform Scenarios," in *Agricultural Trade Reform and the Doha Development Agenda*, ed. Kym Anderson and William J. Martin (Washington, D.C.: World Bank, November 2005), Table 12.14.
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- d. Carnegie Doha Agriculture scenario with 36% agricultural tariff reductions by developed countries, 24% by developing countries, elimination of export subsidies, reduction of domestic agricultural support by one third, and no change by least developed countries.

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Gains (Losses) of World Export Market Share for Developing Countries Agriculture and Food

Carnegie Central Doha Scenario

Change in Percent of World Export Market

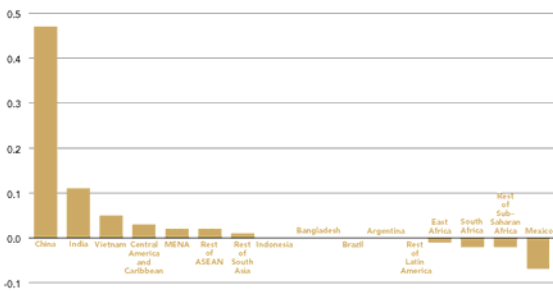


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Gains (Losses) of World Export Market Share for Developing Countries Manufactured Goods

Carnegie Central Doha Scenario

Change in Percent of World Export Market

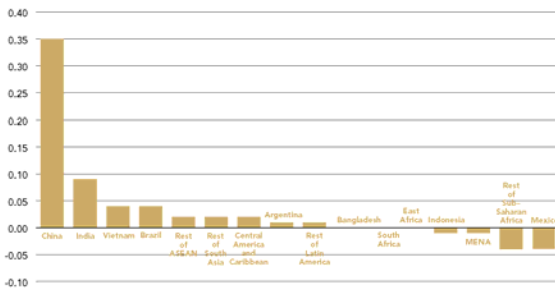


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Gains (Losses) of World Export Market Share for Developing Countries Total Trade

Carnegie Central Doha Scenario

Change in Percent of World Export Market

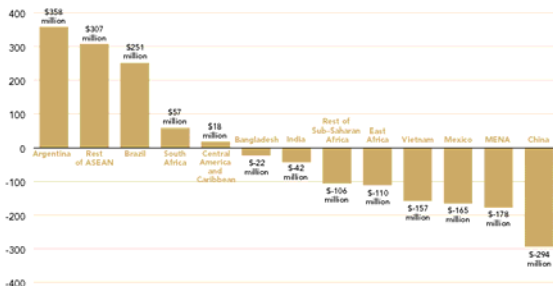


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Agricultural Liberalization: Winners and Losers

Carnegie Doha Scenario for Agriculture*

Changes in Real Income, Millions of US dollars



a. Carnegie Doha Scenario for Agriculture includes 36% agricultural tariff reductions by developed countries, 24% by developing countries, elimination of export subsidies, reduction of domestic agricultural support by one third, and no change by least developed countries.

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Share of Working Population Engaged in Agriculture, 2003

% WORKING IN AGRICULTURE

% WORKING IN AGRICULTURE		% WORKING IN AGRICULTURE	
Karya	74.11%	Syria	26.61%
Vietnam	66.11%	Iran	25.15%
China	64.92%	Ecuador	23.97%
Zimbabwe	60.85%	Algeria	23.56%
India	51.25%	Tunisia	21.50%
Ghana	56.14%	Mexico	19.69%
Cameroon	55.97%	Colombia	18.82%
Thailand	54.09%	Malaysia	16.57%
Indonesia	46.23%	Brazil	15.02%
Cote d'Ivoire	45.91%	Chile	14.92%
Pakistan	45.67%	Argentina	9.09%
Sri Lanka	44.61%	South Africa	8.61%
Guatemala	44.22%	Korea (Republic of)	8.27%
Turkey	44.07%	Venezuela	7.20%
Bolivia	42.36%	Spain	6.35%
Philippines	37.22%	Italy	4.59%
Morocco	33.07%	Australia	4.38%
Egypt	31.49%	Japan	3.39%
Nigeria	30.67%	France	2.89%
Honduras	29.08%	Germany	2.19%
Peru	28.99%	Canada	2.12%
El Salvador	27.12%	United States	1.89%
		United Kingdom	1.68%

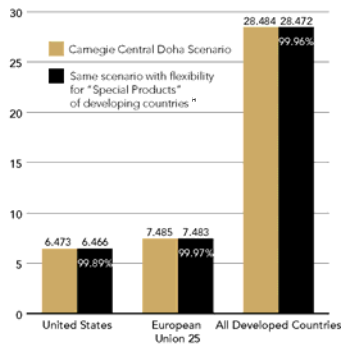
Source: United Nations Food and Agriculture Organization Online Statistical Database

a. The figures reported to FAO probably overstate the agricultural workforce for China, due to the household registration system. Workers may still be counted in the agricultural sector when they have migrated to urban areas. Other Chinese data suggest that about 50 percent of Chinese workers are currently engaged in agriculture.

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Impact of Flexibility for "Special Products" on Developed Country Real Income Gains

Changes in Real Income, Billions of US dollars



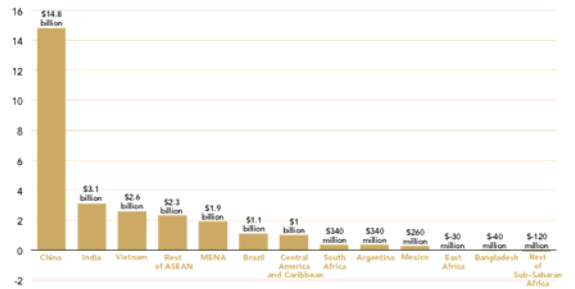
a. This scenario assumes full flexibility, that is, developing countries do not reduce agricultural tariffs at all.

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Manufacturing Liberalization: Winners and Losers

Carnegie Doha Scenario for Manufactured Goods*

Changes in Real Income, Billions of US dollars



a. Carnegie Doha Scenario for manufactured goods includes 50% reduction of tariffs by developed countries, 20% by developing countries and no change by least developed countries.

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